


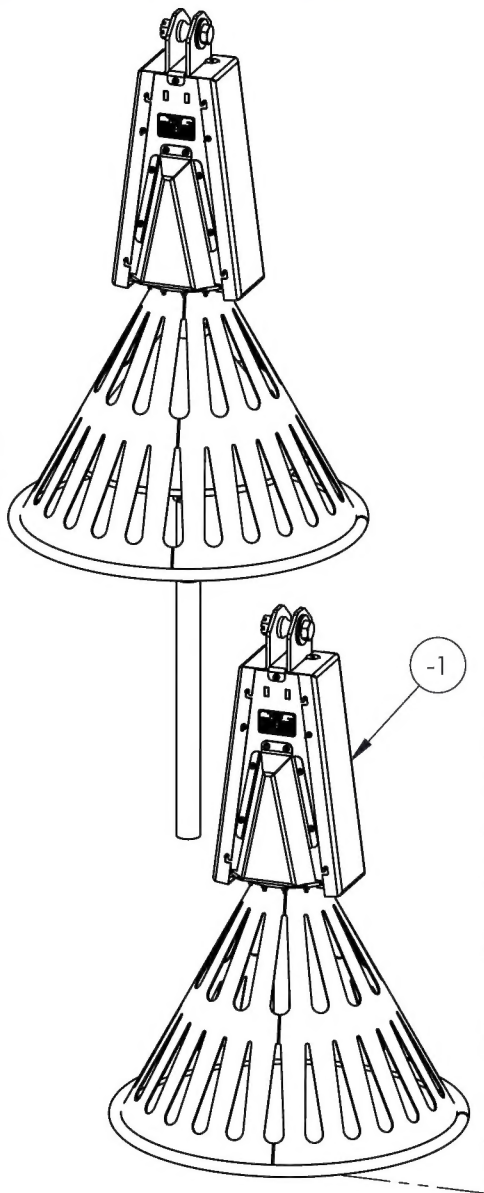
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-89	-75	-61	-49	-47	-39	-3	-1	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
							X		-1	1	MAIN ASSEMBLY			3
						X	1		-3		FRAME WELDMENT			4
					2				-5		FRAME	HR P&O		5
					1				-7		UPPER RING	HR P&O		6
					1				-9		LOWER RING	HR P&O		7
					2				-11		LIFTING PLATE	HR P&O		8
					4				-13		GUSSET	HR P&O		9
					8		B/O		-14		DOWEL PIN	S.S.	Ø1/4 X 3/4 (MCMASTER-CARR #97395A485)	4
						1			-15		MAIN RING	4140/4142		10
						4			-17		ARM	4140/4142		11
						4			-23		LINK	4140/4142		12
						14			-27		LINK PIN	4140 Q&T/4142 Q&T		13
						1			-29		CROSS	4140/4142		14
						1			-31		PUSH ROD	4140 Q&T/4142 Q&T		15
						1			-33		PUSH ROD LINK	4140/4142		16
						4			-35		ANCHOR GUARD	6061		17
					X	1			-39		CONE WELDMENT			18
					1				-41		CONE	304		19
									-41A		CONE FLAT PATTERN			20
					1				-43		CONE FLANGE	304		21
						1			-45		CONE RING	304		22
						1			-46		INSIDE CONE RING	304		23
					X		1		-47		C2-VCT-5 HOOK ASSY			24
					1				C2		C2 HOOK ASSY			24
					X	1			-49		LOAD BEAM ASSEMBLY			25
					1				-51		LOAD BEAM	4140/4142		26
					1				C2-4-2		TRUNNION C2-HOOK	4140/4142 Q&T		25
						1			-55		COVER	1018/1020		27
									-55A		COVER FLAT PATTERN			28
						1			-57		CENTER COVER	1018/1020		29
						2			-59		SIDE COVER	1018/1020		30
									-59A		SIDE COVER FLAT PATTERN			31
1	X								-61		TRIPOD ASSY			32
	2								-63		HALF RING	1018/1020		33
	1								-65		SMALL HOOP	CDS		34
	1								-67		TOP RING	CDS		35
	3								-69		SUPPORT TUBE	CDS		36
	3								-71		UPRIGHT TUBE	CDS		37
	1								-72		SHROUD, TRIPOD	HR P&O		38
									-72A		SHROUD FLAT PATTERN, TRIPOD			39
X									-75	1	PUCK ASSEMBLY			40
1									-77		ANCHOR	4140 Q&T/4142 Q&T		41
2								B/O	-79		HEX HEAD CAP SCREW	STEEL	1/2-20 X 3-1/4, GRADE 8 (MCMASTER-CARR #91257A745)	40
1								B/O	-81		HEX HEAD CAP SCREW	STEEL	1/2-20 X 2-3/4, GRADE 8 (MCMASTER-CARR# 91257A744)	40
3								B/O	-83		WASHER	STEEL	Ø1/2 (MCMASTER-CARR #90126A033)	40
3								B/O	-85		LOCK NUT	STEEL	1/2-20, GRADE 8 (MCMASTER-CARR #97135A255)	40
X							1		-89		COVER ASSY-SOLENOID SIDE			42
1									-91		COVER-SOLENOID SIDE	1018/1020		43
									-91A		COVER-SOLENOID SIDE FLAT PATTERN			44
1									-93		COVER TUBE	1018/1020		45
						1	B/O		-95		SPRING	ZINC PLATED STEEL	1.5 LG CENTURY SPRING# 72573	3
						1	B/O		-97		PUSH ROD BUSHING	SINTERED BRONZE	Ø3/4 I.D. X Ø7/8 O.D. X Ø1-1/8 FLANGE O.D. X 1/8 FLANGE X 1/2 (SYMMCO #SF-2428-B)	3
						14	B/O		-99		SLEEVE BEARING	SINTERED BRONZE	Ø3/8 X Ø1/2 X 1/2 (SYMMCO #SS-1216-B)	3
						28	B/O		-101		THRUST BEARING	BRONZE	Ø3/8 I.D. X Ø5/8 O.D. X 1/16 (SYMMCO #ST-1220-2)	3
						14	B/O		-103		COTTER PIN	S.S.	Ø3/32 X 3/4 (MCMASTER-CARR #98401A442)	3
						2	B/O		-105		JAM NUT	STEEL	3/4-16, THIN GRADE 8 (MCMASTER-CARR #93839A840)	3
						1	B/O		-107		WASHER	S.S.	Ø3/4 (MCMASTER-CARR #91950A036)	3
						14	B/O		-109		WASHER	S.S.	Ø3/8 (MCMASTER-CARR #91950A031)	3
						8	B/O		-111		BOLT	S.S.	1/4-20 X 3-1/4 (MCMASTER-CARR #92198A555)	3
						4	B/O		-113		SOCKET HEAD CAP SCREW	S.S.	1/4-20 X 1 (MCMASTER-CARR #92185A542)	3

-89	-75	-61	-49	-47	-39	-3	-1	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
	2						4	B/O	-115		BOLT	S.S.	1/4-20 X 1-1/4 (MCMASTER-CARR #92198A544)	3, 40
	2						12	B/O	-117		WASHER	S.S.	Ø1/4 (MCMASTER-CARR #96659A106)	3, 40
	2						12	B/O	-119		LOCK NUT	S.S.	1/4-20 (MCMASTER-CARR #91831A029)	3, 40
							4	B/O	-121		THUMB SCREW	SS	1/4-20 x 1/2 (MCMASTER-CARR # 91744A537)	3
							14	B/O	-123		SOCKET HEAD CAP SCREW	S.S.	1/4-20 X 1/2 (MCMASTER-CARR #92196A537)	3
							14	B/O	-125		LOCK WASHER	S.S.	Ø1/4 (MCMASTER-CARR #92146A029)	3
							2	B/O	-127		BOLT	STEEL	5/16-24 X 2-23/32 AN5-25A	3
							4	B/O	-129		WASHER	S.S.	Ø5/16 X Ø5/8 O.D. (MCMASTER-CARR #98370A017)	3
							1	B/O	-131		LOOP CLAMP	STEEL	Ø3/8 (MCMASTER-CARR #3225T3)	3
							1	B/O	-133		HEX HEAD CAP SCREW	S.S.	1/4-20 X 3/8 (MCMASTER-CARR #92240A535)	3
1									-181		PUCK TUBE UPPER	CDS		46
1									-183		PUCK TUBE LOWER	CDS		47
1									-185		TUBE INSERT UPPER	4140/4142		48
1									-187		TUBE INSERT LOWER	4140/4142		49
1									-189		STOP	CDS		50
1								B/O	-191		CHAIN	STEEL	3/8, GRADE 100 3 LINKS (MCMASTER-CARR #34T0184 2FT)	40
1								B/O	-193		HOSE	RUBBER	GAT32EFG5K X 7.8 in PACIFIC RUBBER	40
3								B/O	-195		DOWEL PIN	STEEL	Ø1/2 X 2 (MCMASTER-CARR #98381A720)	40
2								B/O	-197		T-BOLT CLAMP	S.S.	Ø2.516 TO Ø2.812 X 3/4 (APPLIED #TBC275SS)	40
							1	B/O	-219		DART PLACARD	ALUMINUM	#RB41011	3
							1	B/O	-221		GROMMET	RUBBER	Ø1 (MCMASTER-CARR #9307K76)	3
							1	B/O	20NR-89		COTTER PIN	STEEL	Ø1/8 X 2 (MCMASTER-CARR #98338A200)	3
							4	B/O	20NR-85B		LIFTING BOLT WASHER	STEEL	Ø1-1/16 I.D. (MCMASTER-CARR #90108A038)	3
							1		20NR-08		LIFTING BUSHING	4140/4142		3
							1		20NR-07A		LIFTING BOLT	STEEL	1"-8 X 5-1/2, GRADE 8 (MCMASTER-CARR #91257A967) MODIFIED	3
							1	B/O	20NR-07		LIFTING BOLT NUT	STEEL	1"-8, GRADE 5 (MCMASTER-CARR #97190A040)	3
							2	B/O	AN960-516		CAGE BOLT WASHER	STEEL	Ø5/16	3
							2	B/O	MS21044N5		CAGE BOLT LOCKNUT	STEEL	5/16-24	3

		
TITLE VERTICAL CAPTURE TRANSPORT		
DWG NO. VCT-5		REV 3
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		DRAWN BY: GILBERT APPROVED <i>D Weil</i> TREAT FINISH SPEC USED ON MODEL
SCALE 1:8	DATE 8/6/2014	SHEET 1 OF 50

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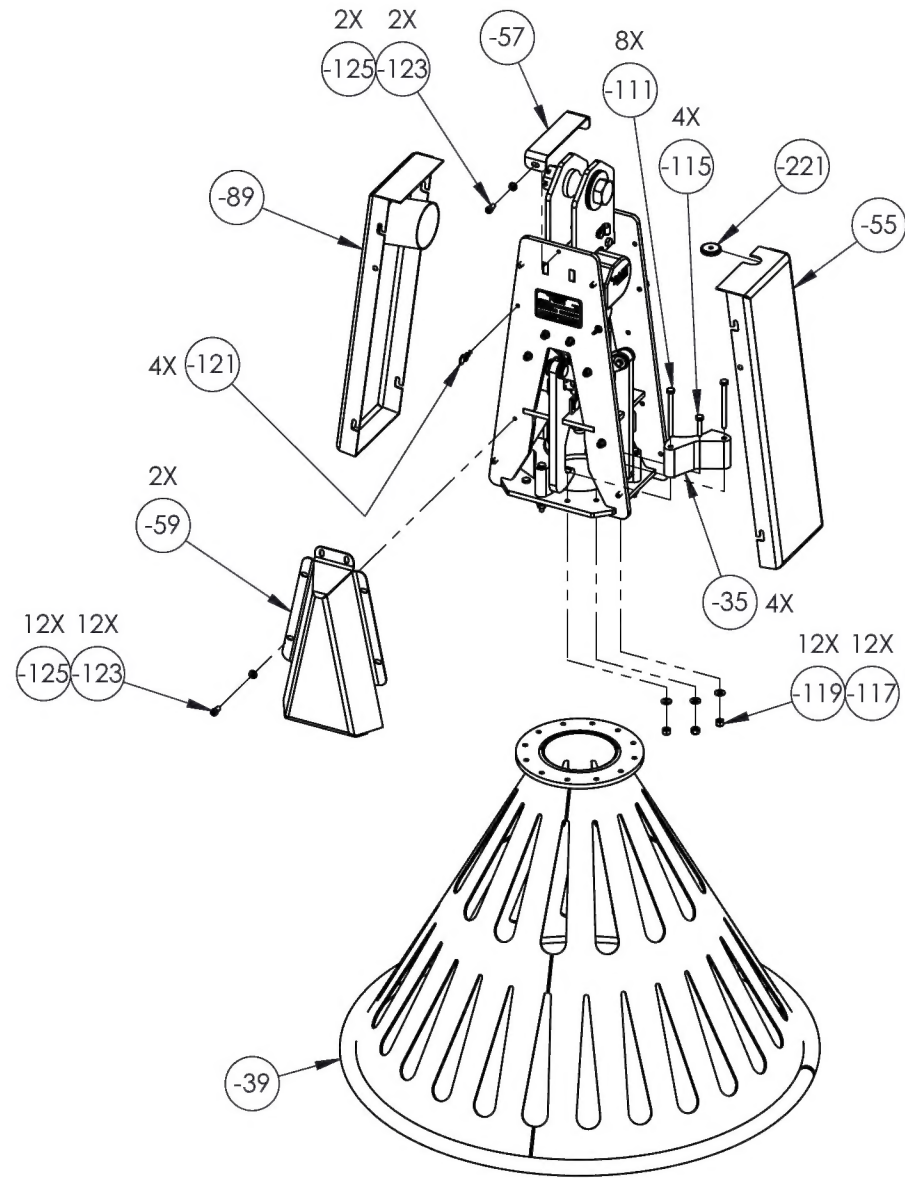
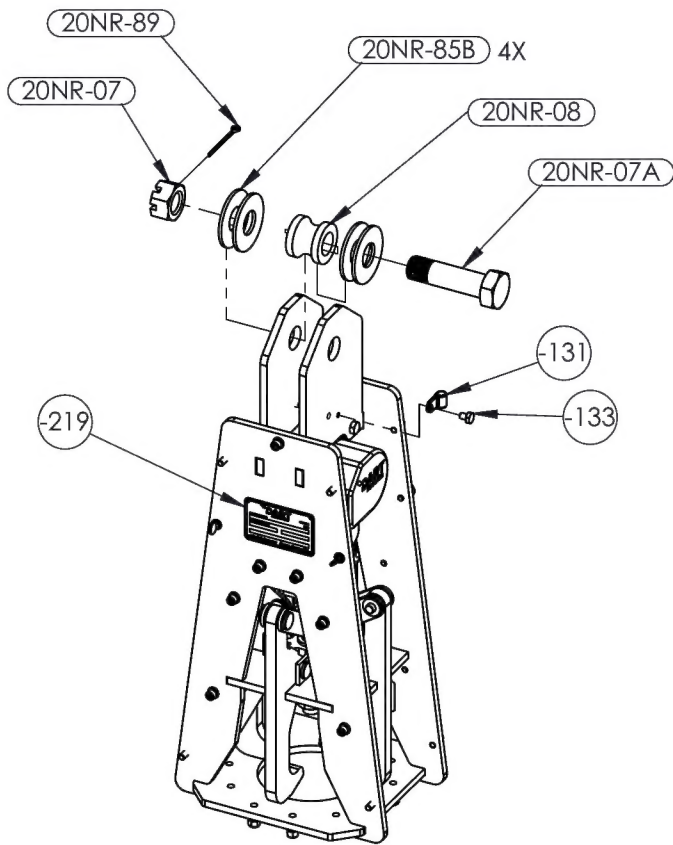
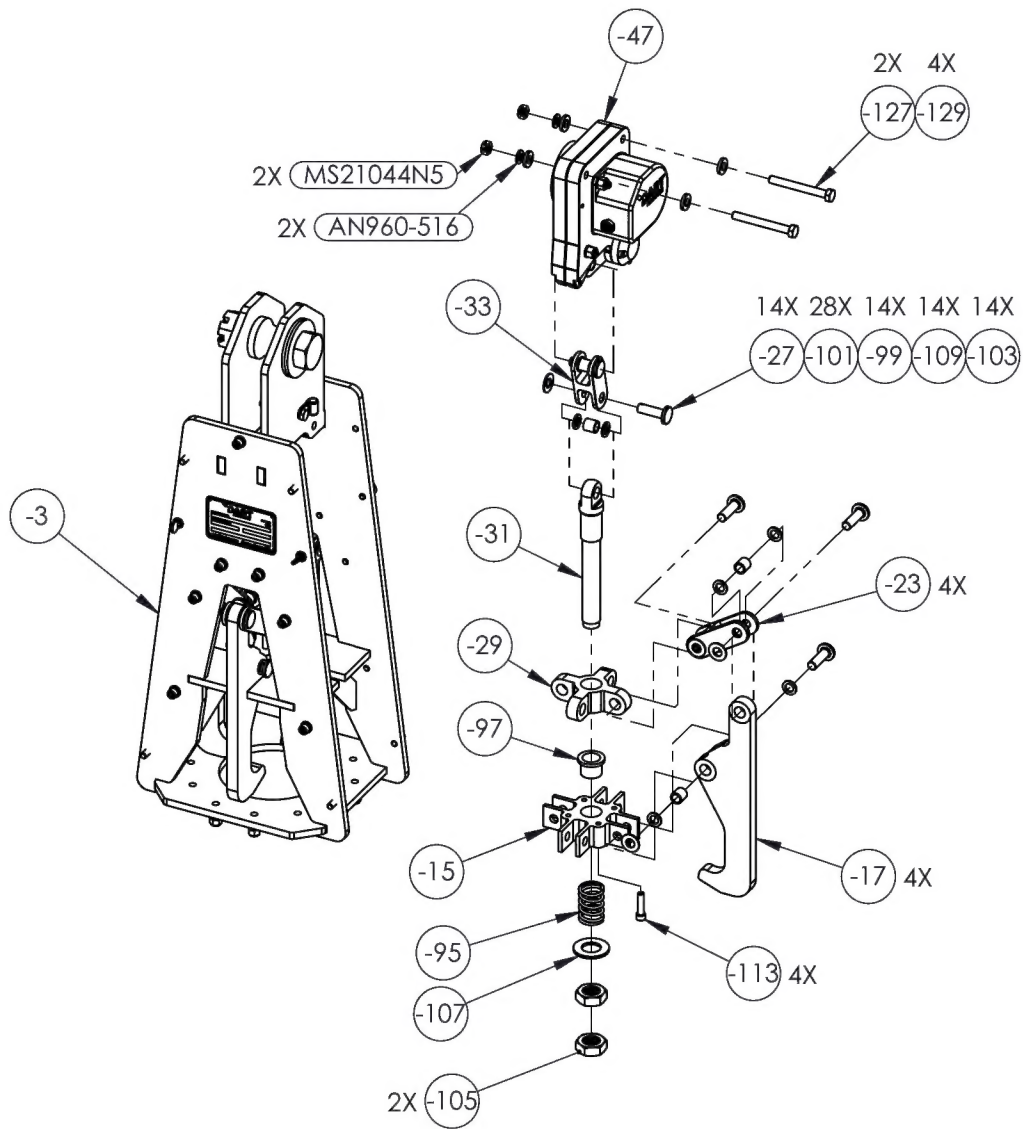
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	<b>-39</b> INCREASED Ø BY 6" AND HEIGHT BY 5-5/8". CH'D MAT'L WAS STEEL IS SS. ADDED INSIDE CONE RING <b>-46</b> . <b>-41</b> INCREASED Ø BY 6" AND HEIGHT BY 5-5/8". CH'D FROM FULL LENG SLOTS TO 2 ROWS OF SLOTS. CH'D MAT'L WAS STEEL IS SS. ADDED VENDOR OPTION NOTE. <b>-41A</b> CH'D FROM FULL LENG SLOTS TO 2 ROWS OF SLOTS. CH'D MAT'L WAS STEEL IS SS. ADDED VENDOR OPTION NOTE. ADDED DXF NOTE. <b>-43</b> CH'D MAT'L WAS HR P&O IS 304. <b>-45</b> INCREASED Ø BY 6". CH'D MAT'L WAS 1018 IS 304. <b>-46</b> ADDED SHEET.	1/26/2015	DPD	JAG
2	15-0043	<b>UPDATED TO NEW DRAFTING STANDARDS. -1</b> DELETED -121, -135, -139, -141, -143, -145, -171, -173, -175, -179, 2X -117, 2X -119, 4X -123, 4X -125, 2X -131, 2X -133, C2-8HC-65, ADDED -211, -213, -215, -217, -219. <b>-3</b> CH'D FINISH WAS POWDER COAT YELLOW FED #13538 IS POWDER COAT LIME GREEN. ADDED <b>-14</b> TO WELDMENT. ADDED MASK BEFORE POWDER COAT NOTE. <b>-5</b> UPDATED HOLE TABLE AND ADDED 4X LIMITS Ø.2490 - .2496, 2X LIMITS Ø.254 - .250. DELETED HOLE B1. ADDED DIMS 1.51, 2X .37, 2X 1.45, 2X .81, CH'D DIMS WAS 4.75 IS 5.36, WAS 20.25 IS 18.60. <b>-7</b> CH'D DIMS WAS 2X 2.83 IS 2X 2.825 ±.010, WAS 3X 45° IS 45°, WAS 4X Ø.257 THRU ALL IS 4X Ø.257 THRU ALL EQUALLY SPACED. <b>-11</b> CH'D DIMS WAS 8.13 IS 6.88, WAS 6.83 IS 5.18, WAS .87 IS 1.18, ADDED DIMS 2X .75, (.313), 5.65, DELETED DIMS 2X .25 X 45°, 2X 1/4-20 UNC-2B THRU ALL, 2X Ø.27 THRU ALL. <b>-13</b> CH'D DIM WAS (.50) IS (.63). <b>-15</b> CH'D DIMS WAS 4X .665 IS 4X .685, WAS (8X .17) IS (8X .16). <b>-17</b> CH'D DIM WAS 2X LIMITS Ø.4385-4389 THRU ALL IS 2X LIMITS Ø.5008-5015 THRU ALL. ADDED DIMS 2X (.17) Ø1.00 MIN, 2X .495. <b>-23</b> CH'D DIMS WAS 2X .665 IS 2X .685, WAS 2X .168 IS 2X .158, WAS (2X .168) IS (2X .158). <b>-27</b> CH'D DIM WAS .02 X 45° IS 2X .02 X 45°. <b>-29</b> CH'D DIMS WAS LIMITS Ø.4385-4389 THRU IS 4X LIMITS Ø.5008-5015 THRU, WAS 2X 3.50 IS (2X 3.50), WAS 7/8-14 UNF IS 7/8-20 UNEF. <b>-31</b> REMOVE HEAT TREAT, CH'D DIMS WAS LIMITS Ø.4385-4389 THRU IS LIMITS Ø.5008-5015 THRU, WAS .500 IS .495, WAS 7/8-14 UNF IS 7/8-20 UNEF. <b>-33</b> CH'D DIMS WAS 2X .665 IS 2X .685, WAS 2X .168 IS 2X .158, WAS (.168) IS (2X .158). ADDED DIM 2X .02 X 45°. <b>-35</b> ADDED DIMS 2X .83, (R.390). <b>-47</b> DELETED -53, DELETED TAPPED HOLE AND VIEW SHOWING TAPPED HOLE. <b>-51</b> CH'D DIM WAS LIMITS Ø.4385-4389 THRU ALL IS LIMITS Ø.5008-5015 THRU ALL, ADDED DIMS .625, 45°. ADDED USE DXF PROFILE FOR CONTOURS NOTE. <b>-55</b> & <b>-91</b> REDESIGNED. <b>-59</b> CH'D DIMS WAS 1.90 IS 2X 1.90, WAS 60° IS 3X 60°. ADDED DIMS 1.23, 2.22, 4.20, 6.19, 2X .44, R.25 TYP. <b>-61</b> , <b>-65</b> , <b>-69</b> , <b>-71</b> REDESIGNED. <b>-67</b> CH'D MAT'L WAS STEEL IS CDS. <b>-72</b> & <b>-72A</b> ADDED SHEETS. <b>-73</b> DELETED SHEET. <b>-93</b> DIM WAS 3.13 IS 3.20. <b>-99</b> CH'D B/O INFO WAS SYMMCO SS-1214-8 IS SYMMCO SS-1216-8. <b>-101</b> CH'D B/O INFO WAS MCMMASTER-CARR #92916A405 IS SYMMCO #ST-1220-2. <b>-113</b> CH'D B/O INFO WAS #92185A564 IS #92185A542. <b>-117</b> & <b>-119</b> CH'D QTY WAS 16 IS 18. <b>-181</b> ADDED DIMS .12 X 45°, Ø1.98 S.F. -193, 4.5, ADDED HOLE TIMING NOTE, ADDED FINISH POWDER COAT SAFETY ORANGE. <b>-183</b> ADDED DIMS .12 X 45°, Ø1.98 S.F. -193, 9.8, ADDED FINISH PAINT GRAY OR RED. <b>-185</b> CH'D DIM WAS Ø1.25 S.F. -181 IS Ø1.240(+.000-.005) S.F. -181, WAS .4985-.4992 IS .5006-.5009 THRU ALL. CH'D MAT'L WAS 1018 IS 4140/4142, ADDED HEAT TREAT RC 35-39, ADDED FINISH PAINT GRAY OR RED. <b>-187</b> CH'D DIMS WAS Ø1.25 S.F. -183 IS Ø1.240(+.000-.005) S.F. -183, WAS LIMITS Ø.4989-.4996 IS LIMITS Ø.5006-.5009 THRU ALL. CH'D MAT'L WAS 1018 IS 4140/4142, ADDED HEAT TREAT RC 35-39, ADDED NOTE PAINT GRAY OR RED. <b>-197</b> CH'D B/O INFO WAS TBC-250S PACIFIC RUBBER IS APPLIED #TBC275SS. CH'D P/N'S WAS C2-20-25 IS MS21044N5, WAS C2-20-27 IS AN960-516.	2/11/2015	PMW	JAG
3	15-0236	<b>-1</b> ADDED -221 GROMMET, CH'D -127 WAS 5/16-24 X 2-3/4 MCMMASTER-CARR #91257A615 IS 5/16-24 X 2-23/32 AN5-25A, -211 DELETED, 20NR-85B CH'D QTY. WAS 2X IS 4X. <b>-5</b> CH'D D1 & D2 DIM WAS Ø.254-.250 THRU ALL IS 1/4-20 UNC -2B THRU ALL. <b>-14</b> WAS Ø1/4 X 1 #97395A491 IS Ø1/4 X 3/4 #97395A485. <b>-27</b> CH'D MATERIAL CALLOUT WAS 4140/4142 Q&T IS 4140 Q&T/4142 Q&T. <b>-31</b> ADDED MIN. THREAD RELIEF CALLOUT. <b>-55</b> ADDED MISSING DIM 1.68. <b>-57</b> CH'D DIM WAS 1.50 IS 1.48 ±.00-.03. <b>-61</b> CH'D FINISH WAS SAFETY ORANGE IS SAFETY YELLOW, ADDED NOTE <b>-71</b> . <b>-72</b> CH'D DIM WAS Ø19.48 IS Ø19.60. <b>-75</b> ADDED OVERALL HEIGHT 52.5 DIM. <b>-55</b> , <b>-57</b> , <b>-59</b> , <b>-91</b> , <b>-93</b> CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020. <b>-95</b> CH'D BOM INFO WAS 1.5 LG X 1.062 CENTURY SPRING 10645 IS 1.5 LG CENTURY SPRING #72573, <b>-127</b> WAS 5/19-24 X 2-3/4 MCMMASTER-CARR #91257A615 IS 5/16-24 X 2-23/32 #AN5-25A. <b>-181</b> AND <b>-189</b> CH'D FINISH WAS POWDER COAT SAFETY ORANGE IS POWDER COAT SAFETY YELLOW. DELETED <b>-211</b> , <b>-213</b> , <b>-215</b> , <b>-217</b> , AND <b>C2-8HC-83</b> . <b>-221</b> ADDED GROMMET. <b>20NR-85B</b> CH'D QTY. WAS 2X IS 4X.	10/8/2015	RJC	JAG

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5	REV 3
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: GILBERT APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:16	DATE 8/6/2014
SHEET 2 OF 50	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-1 DELETED -121, -135, -139, -141, -143, -145, -171, -173, -175, -179, 2X -117, 2X -119, 4X -123, 4X -125, 2X -131, 2X -133, ADDED -203, -205, -207, -209.	2/11/2015	PMW	JAG
3	15-0326	-1 ADDED -221 GROMMET, CH'D -127 WAS 5/16-24 X 2-3/4 MCMASTER-CARR #91257A615 IS 5/16-24 X 2-23/32 AN5-25A, -211 DELETED, 20NR-85B CH'D QTY. WAS 2X IS 4X.	10/8/2015	RJC	JAG

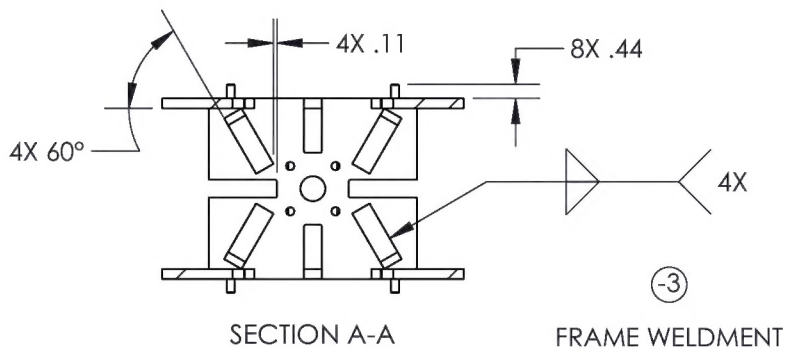



-1  
MAIN ASSY

DART AEROSPACE			
TITLE VERTICAL CAPTURE TRANSPORT			REV 3
DWG NO. VCT-5-1			
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		DRAWN BY: GILBERT APPROVED: P Waltrich TREAT FINISH SPEC USED ON MODEL	
SCALE 1:8	DATE 8/6/2014	SHEET 3 OF 50	

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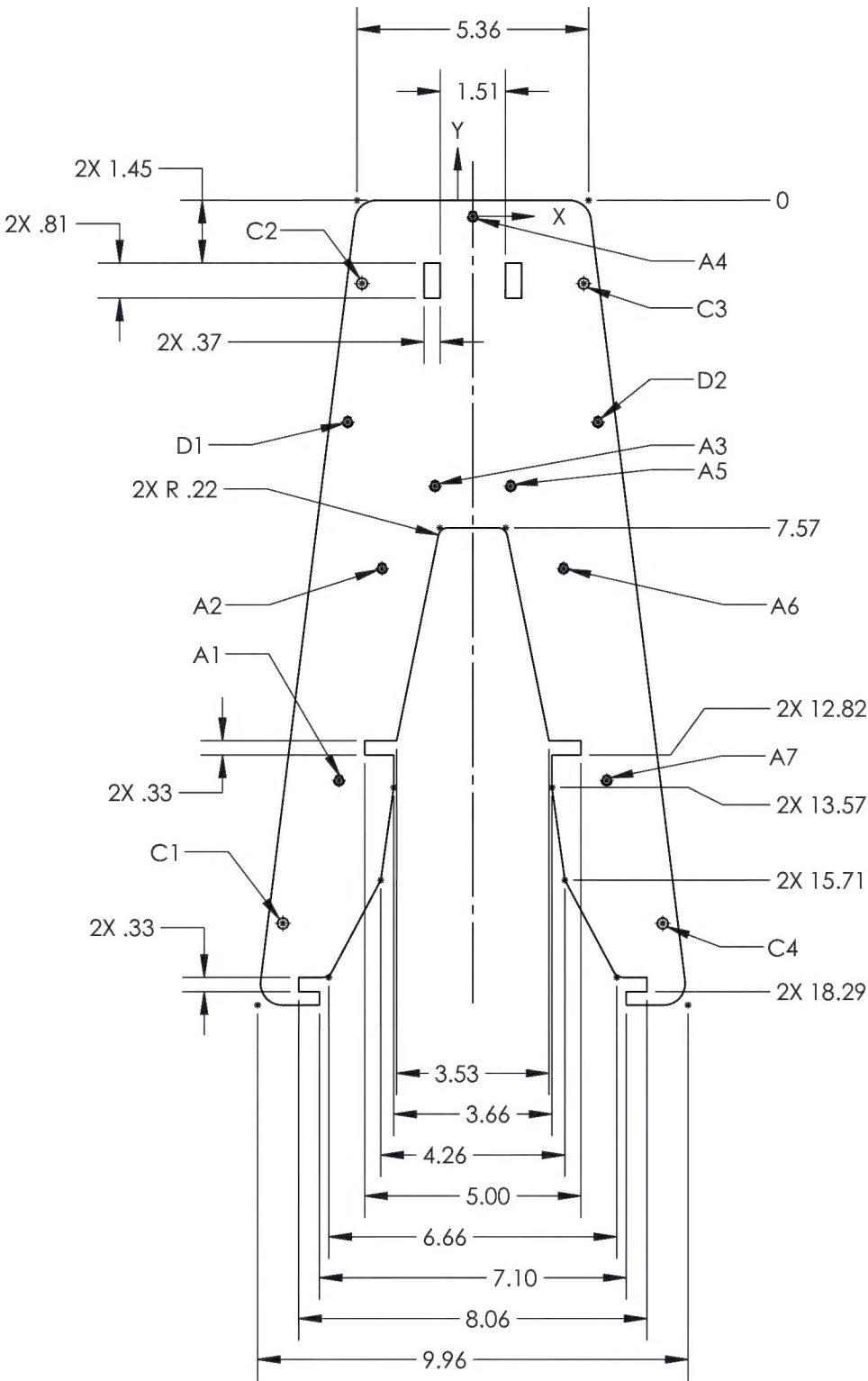
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-3 CH'D FINISH WAS POWDER COAT YELLOW FED #13538 IS POWDER COAT LIME GREEN. ADDED -14 TO WELDMENT. ADDED MASK BEFORE POWDER COAT NOTE.	2/11/2015	PMW	JAG



			
TITLE VERTICAL CAPTURE TRANSPORT			
DWG NO. VCT-5-3			REV 3
MAT'L		DRAWN BY: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVED <i>P Waltrich</i>	
.XXX ± .005      FRACTIONS ± 1/8 .XX ± .01      ANGLES ± 5° .X ± .1		REAT TREAT FINISH	
1. BREAK ALL SHARP EDGES .015 x .45" OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		POWDER COAT LIME GREEN	
		SPEC USED ON MODEL	
SCALE 1:6	DATE 8/6/2014	SHEET 4 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-5 UPDATED HOLE TABLE AND ADDED 4X LIMITS Ø.2490 - .2496, 2X LIMITS Ø.254 - .250, DELETED HOLE B1. ADDED DIMS 1.51, 2X .37, 2X 1.45, 2X .81. CH'D DIMS WAS 4.75 IS 5.36, WAS 20.25 IS 18.60.	2/11/2015	PMW	JAG
3	15-0326	-5 CH'D D1 & D2 DIM WAS Ø.254-.250 THRU ALL IS 1/4-20 UNC -2B THRU ALL.	10/8/2015	RJC	JAG



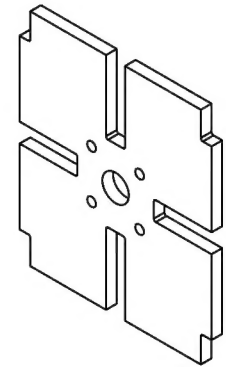
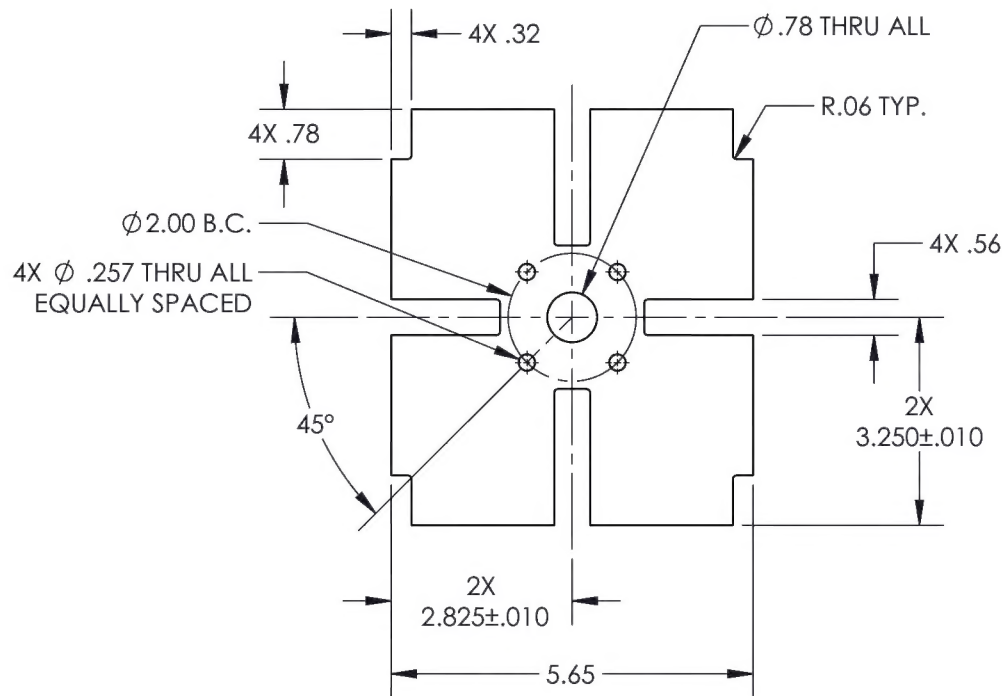
TAG	X LOC	Y LOC	SIZE
A1	-3.10	-13.41	1/4-20 UNC - 2B THRU ALL
A2	-2.10	-8.51	
A3	-.88	-6.60	
A4	-.00	-.38	
A5	.88	-6.60	
A6	2.10	-8.51	
A7	3.10	-13.41	
C1	-4.39	-16.71	Ø .2496 .2490 THRU ALL
C2	-2.57	-1.92	
C3	2.57	-1.92	
C4	4.39	-16.71	
D1	-2.90	-5.12	1/4-20 UNC - 2B THRU
D2	2.90	-5.12	

(-5)  
FRAME

DART AEROSPACE			
TITLE VERTICAL CAPTURE TRANSPORT			
DWG NO. VCT-5-5			REV 3
MAT'L HR P&O		DRAWN BY: GILBERT	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVED <i>P Waltrick</i>	
.XXX ± .005		FRACTIONS ± 1/8	
.XX ± .01		ANGLES ± 5°	
.X ± .1		FINISH SEE -3 WELDMENT	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		SPEC	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON MODEL	
SCALE 1:4	DATE 8/5/2014	SHEET 5 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-7 CH'D DIMS WAS 2X 2.83 IS 2X 2.825±.010, WAS 3X 45° IS 45°, WAS 4X Ø.257 THRU ALL IS 4X Ø.257 THRU ALL EQUALLY SPACED.	2/11/2015	PMW	JAG

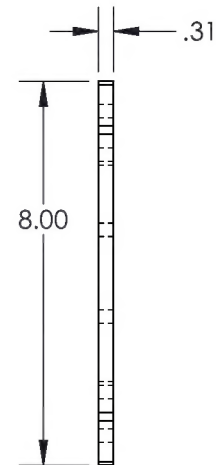
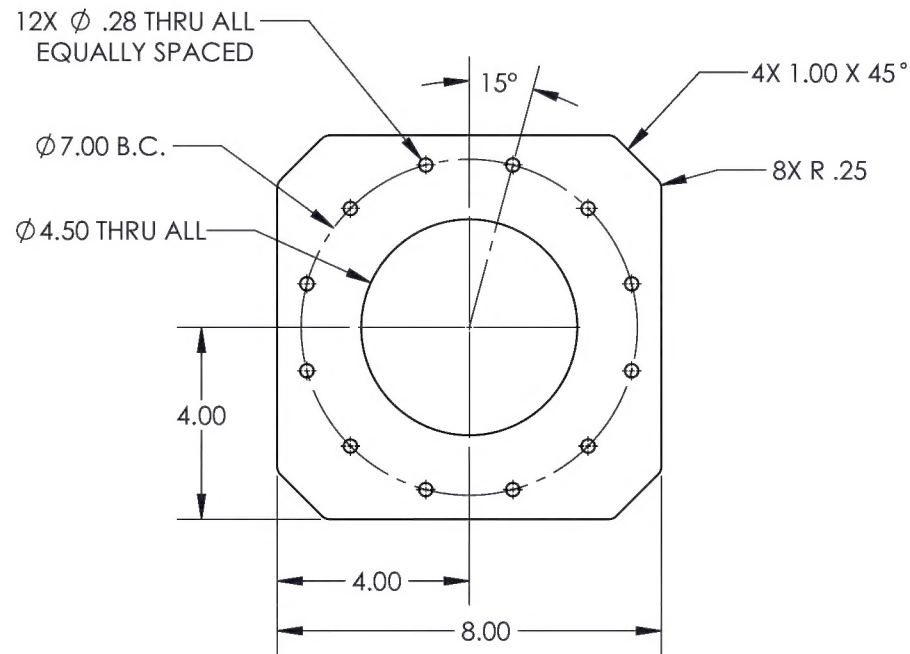
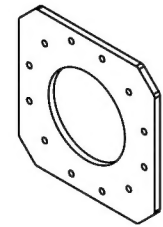


(-7)  
UPPER RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-7</b>	REV <b>3</b>
MAT'L HR P&O	DRAWN BY: <b>GILBERT</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <b>P Walbrich</b>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH SEE -3 WELDMENT
.X ± .1	ANGLES ± 5°
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:3	DATE 8/5/2014
SHEET 6 OF 50	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



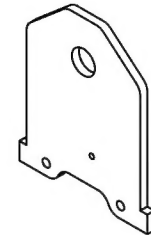
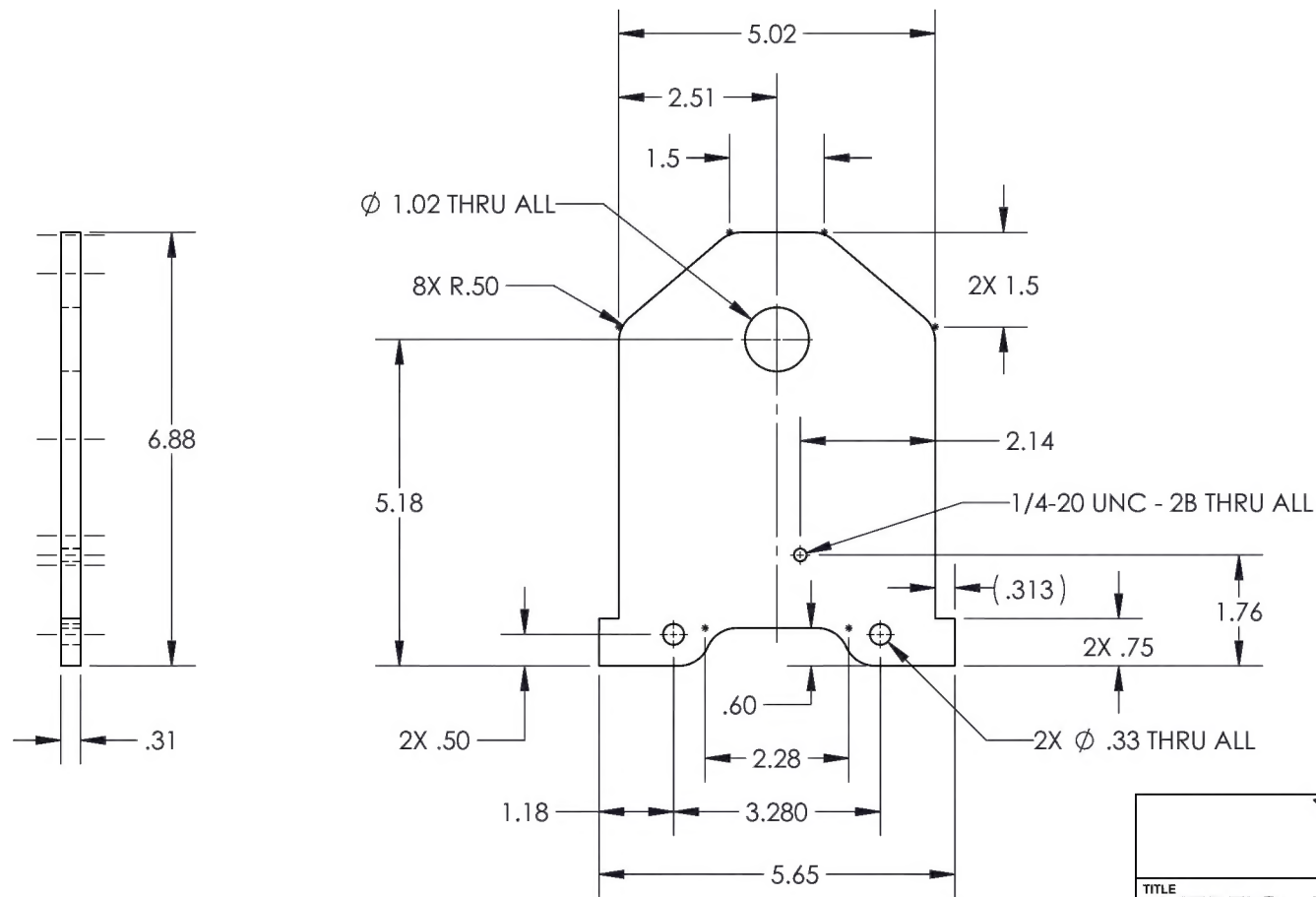
(-9)  
LOWER RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-9</b>	REV <b>3</b>
MAT'L HR P&O UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX $\pm$ .005 FRACTIONS $\pm$ 1/8 .XX $\pm$ .01 ANGLES $\pm$ .5° .X $\pm$ .1	DRAWN BY: <b>GILBERT</b> APPROVED <b>P Walbrich</b> HEAT TREAT FINISH SEE -3 WELDMENT SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:4	DATE 8/5/2014
SHEET 7 OF 50	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-11 CH'D DIMS WAS 8.13 IS 6.88, WAS 6.83 IS 5.18, WAS .87 IS 1.18, ADDED DIMS 2X .75, (.313), 5.65, DELETED DIMS 2X .25 X 45°, 2X 1/4-20 UNC-2B THRU ALL, DELETED 2X Ø.27 THRU ALL.	2/11/2015	PMW	JAG



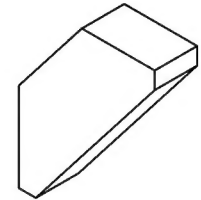
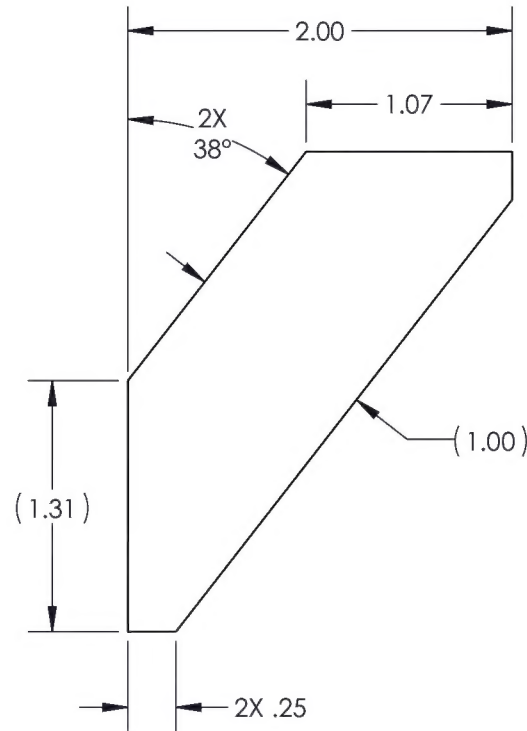
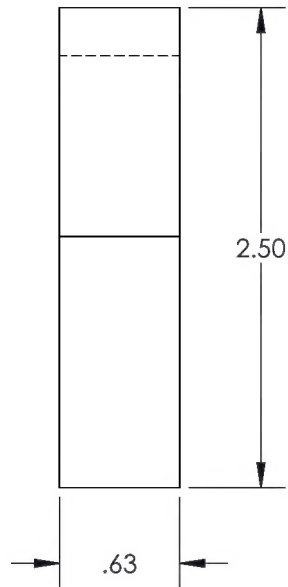
(-11)  
LIFTING PLATE

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-11</b>	REV <b>3</b>
MAT'L HR P&O <b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</b>	DRAWN BY: <b>GILBERT</b>
<b>.XXX ± .005</b>	APPROVED <b>P Walbrich</b>
<b>.XX ± .01</b>	HEAT TREAT <b>SEE WELDMENT -3</b>
<b>.X ± .1</b>	FINISH
<b>ANGLES ± 5°</b>	SPEC
<b>1. BREAK ALL SHARP EDGES .015 x 45° OR .015R</b>	USED ON MODEL
<b>2. DIMENSIONAL LIMITS APPLY AFTER PLATING</b>	
SCALE <b>1:3</b>	DATE <b>8/5/2014</b>
SHEET 8 OF 50	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-13 CH'D DIM WAS (.50) IS (.63).	2/11/2015	PMW	JAG

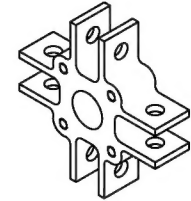
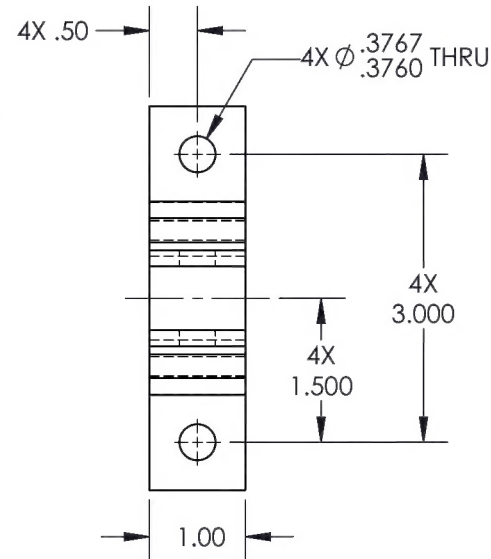
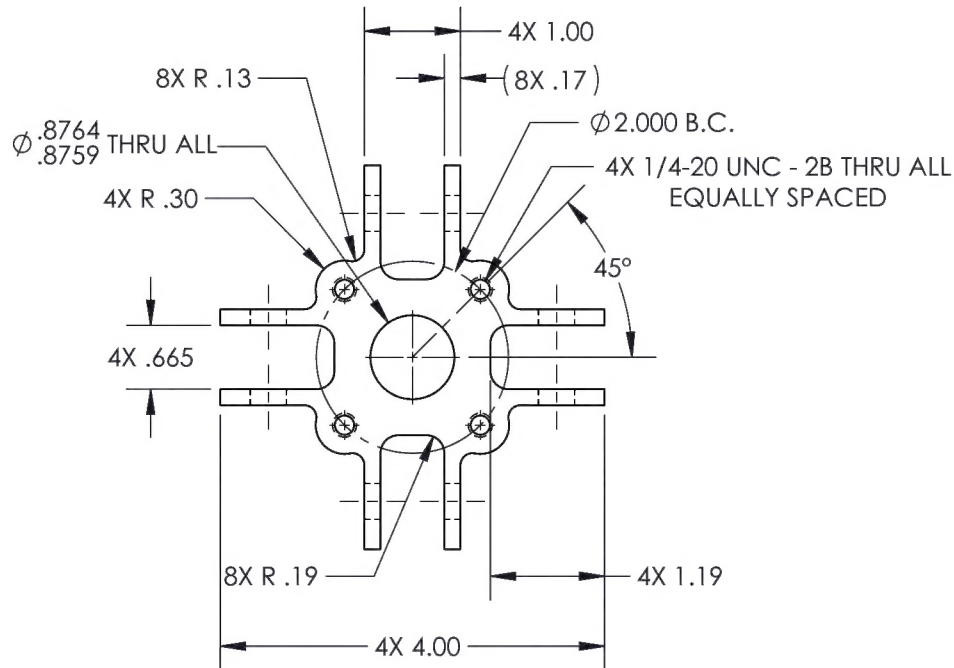


(-13)  
GUSSET

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-13</b>	REV <b>3</b>
MAT'L HR P&O	DRAWN BY: <b>GILBERT</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <b>P Walbrich</b>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH SEE -3 WELDMENT
.X ± .1	ANGLES ± 5°
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:1	DATE 8/5/2014
SHEET 9 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-15 CH'D DIMS WAS 4X .665 IS 4X .685, WAS (8X .17) IS (8X .16).	2/11/2015	PMW	JAG



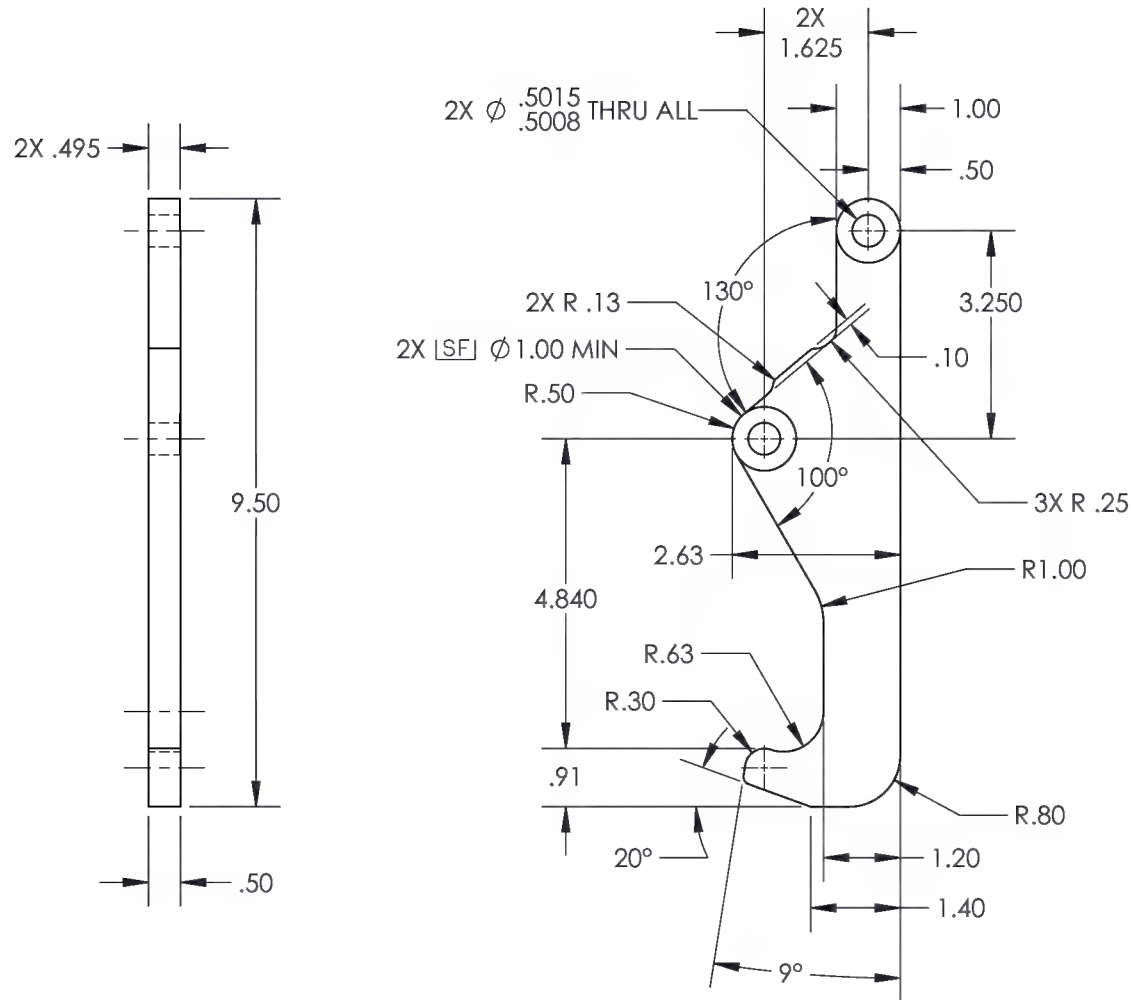
NOTE:  
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

(-15)  
MAIN RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-15</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005 FRACTIONS ± 1/32	HEAT TREAT RC 35-39
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/5/2014
SHEET 10 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-17 CH'D DIM WAS 2X LIMITS Ø.4385-.4389 THRU ALL IS 2X LIMITS Ø.5008-.5015 THRU ALL. ADDED DIMS 2X [SF] Ø1.00 MIN, 2X .495.	2/11/2015	PMW	JAG



NOTE:  
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

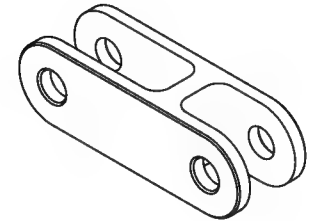
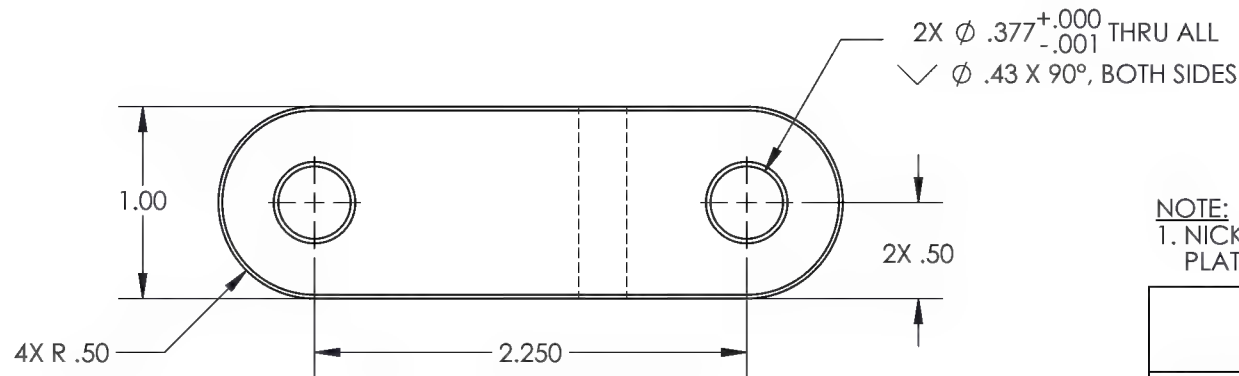
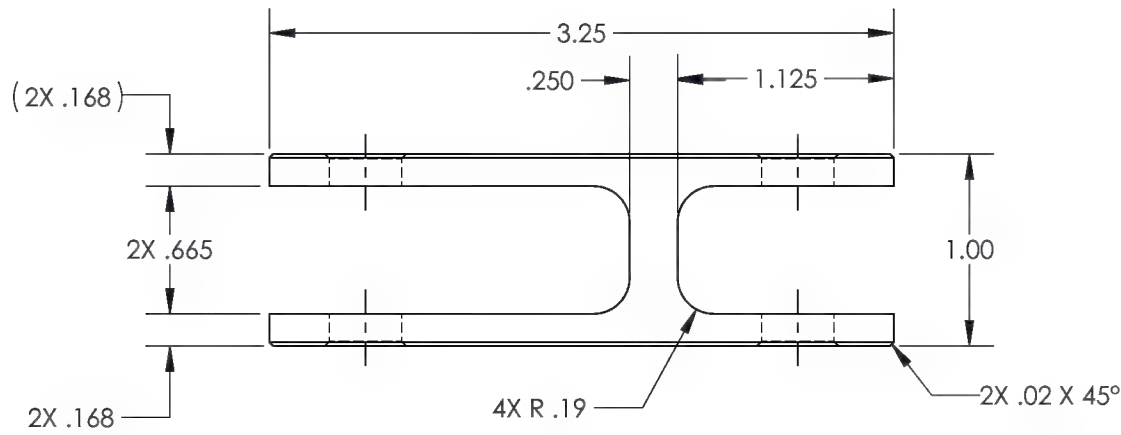
<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-17</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005	HEAT TREAT RC 45-49
.XX ± .01	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:3	DATE 8/4/2014
SHEET 11 OF 50	

(-17)

ARM

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-23 CH'D DIMS WAS 2X .665 IS 2X .685, WAS 2X .168 IS 2X .158, WAS (2X .168) IS (2X .158).	2/11/2015	PMW	JAG



**NOTE:**  
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

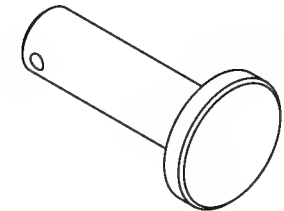
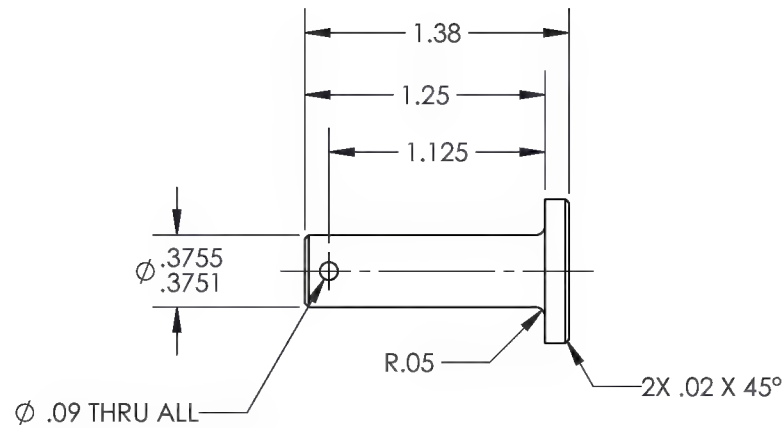
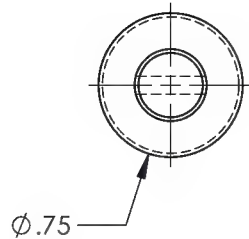
(-23)  
LINK

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-23</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 35-39
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 6/16/2014
SHEET 12 OF 50	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-27 CH'D DIM WAS .02 X 45° IS 2X .02 X 45°.	2/11/2015	PMW	JAG
3	15-0326	-27 CH'D MATERIAL CALLOUT WAS 4140/4142 Q&T IS 4140 Q&T/4142 Q&T.	10/8/2015	RJC	JAG



**NOTE:**

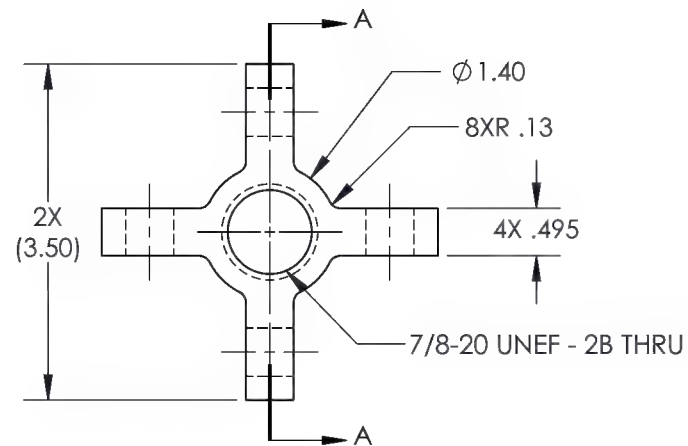
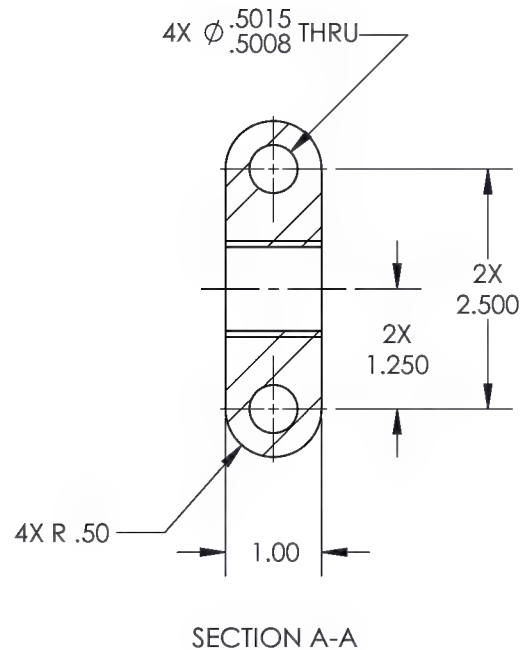
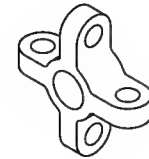
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

(-27)  
LINK PIN

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-27</b>	REV <b>3</b>
MAT'L 4140 Q&T/4142 Q&T	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005	HEAT TREAT RC 35-39
.XX ± .01	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 8/5/2014
SHEET 13 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-29 CH'D DIMS WAS LIMITS Ø.4385-.4389 THRU IS 4X LIMITS Ø.5008-.5015 THRU, WAS 2X 3.50 IS (2X 3.50), WAS 7/8-14 UNF IS 7/8-20 UNEF.	2/11/2015	PMW	JAG



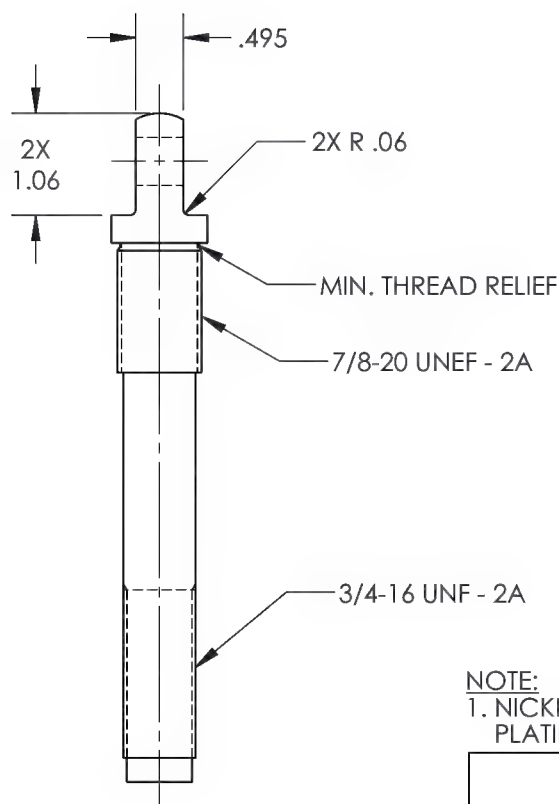
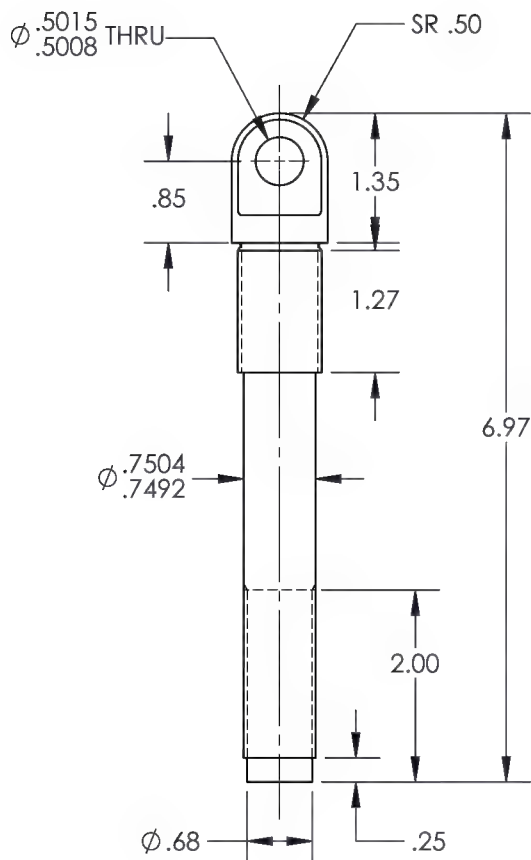
NOTE:  
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

(-29)  
CROSS

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-29</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005	HEAT TREAT RC 35-39
.XX ± .01	FINISH SEE NOTE 1
.X ± .1	ANGLES ± 5°
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:2	DATE 8/6/2014
SHEET 14 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-31 REMOVED HEAT TREAT. CH'D DIMS WAS LIMITS Ø.4385-.4389 THRU IS LIMITS Ø.5008-.5015 THRU, WAS .500 IS .495, WAS 7/8-14 UNF IS 7/8-20 UNEF,	2/11/2015	PMW	JAG
3	15-0326	-31 ADDED MIN. THREAD RELIEF CALLOUT.	9/28/2015	RJC	JAG



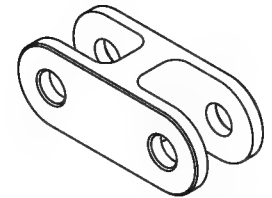
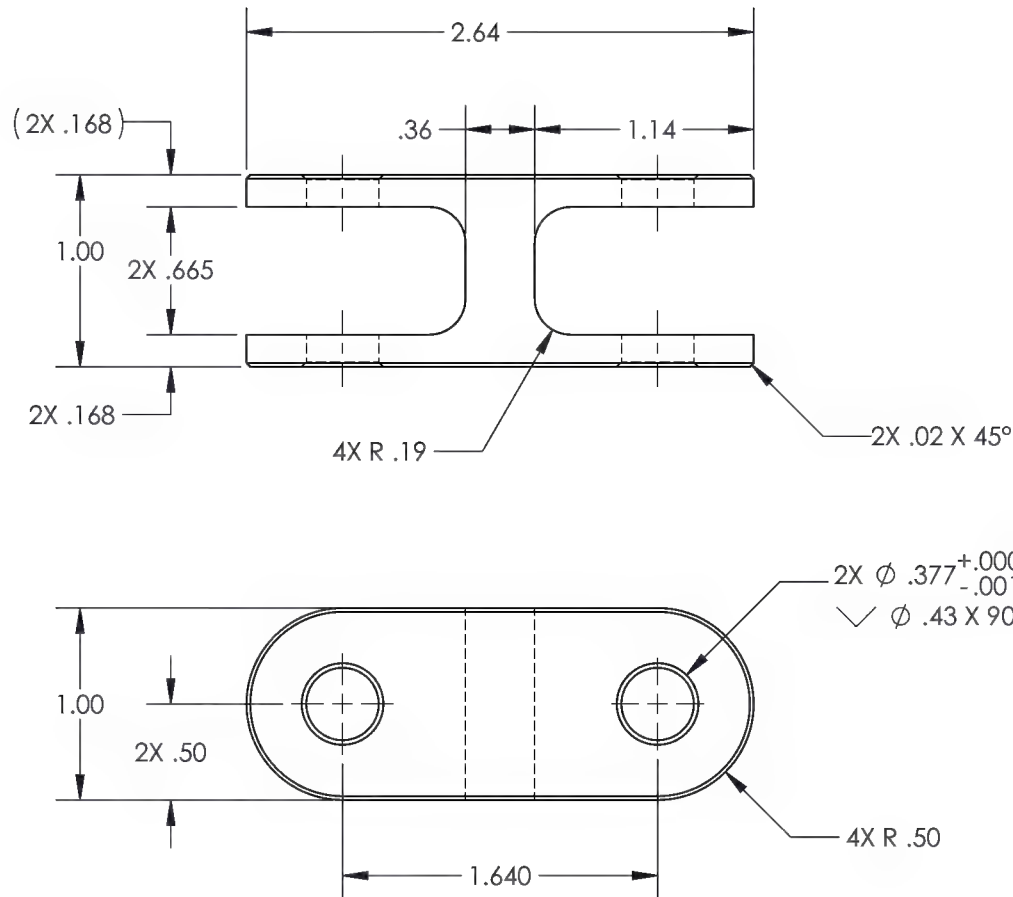
NOTE:  
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

(-31)  
PUSH ROD

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-31</b>	REV <b>3</b>
MAT'L 4140 Q&T/4142 Q&T	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/5/2014
SHEET 15 OF 50	

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REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED
2	15-0043	-33 CH'D DIMS WAS 2X .665 IS 2X .685, WAS 2X .168 IS 2X .158, WAS (.168) IS (2X .158). ADDED DIM 2X .02 X 45°.			2/11/2015	PMW	JAG



**NOTE:**  
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

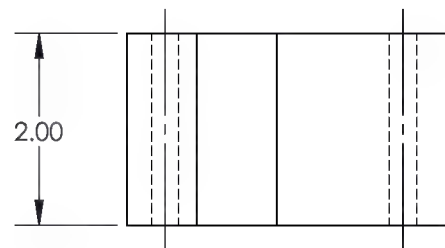
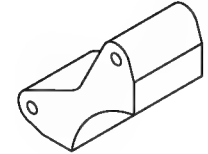
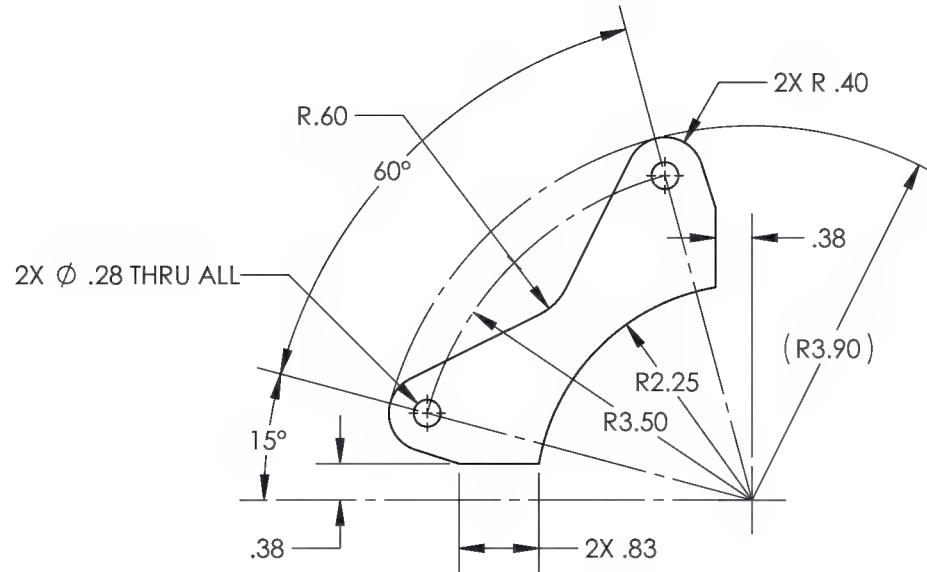
(-33)  
PUSH ROD LINK

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-33</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 35-39
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 8/5/2014
SHEET 16 OF 50	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-35 ADDED DIMS 2X .83, (R.390).	2/11/2015	PMW	JAG



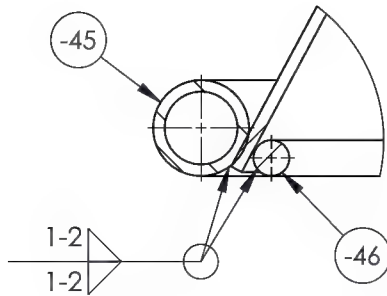
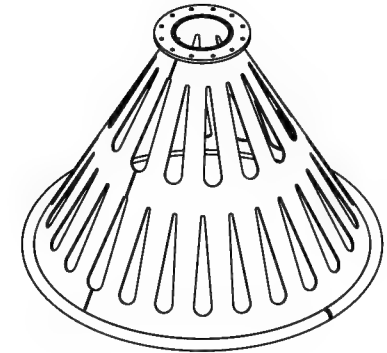
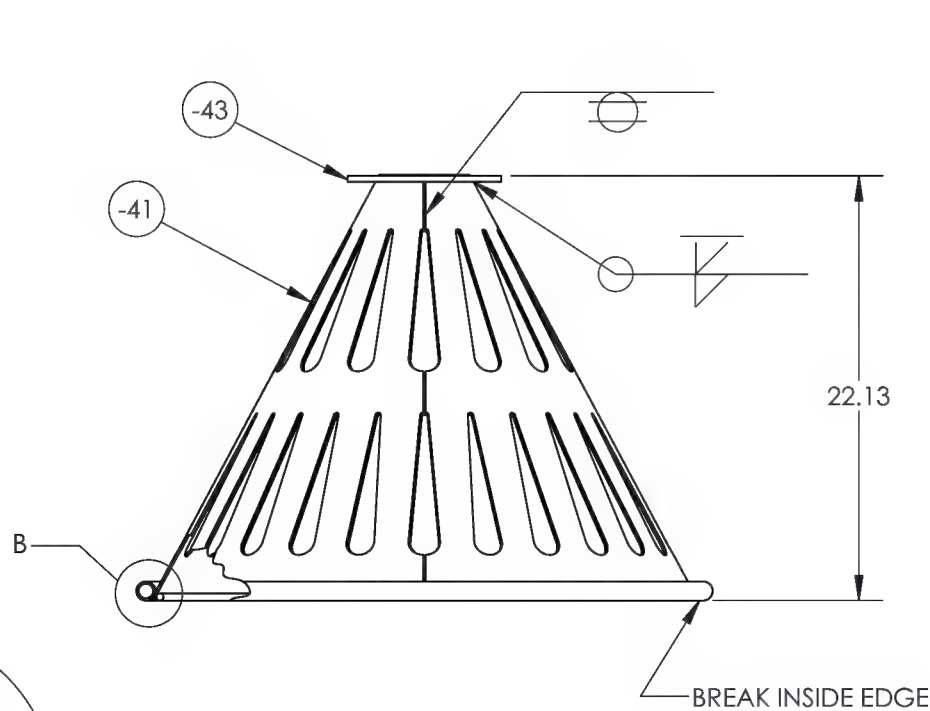
(-35)

ANCHOR GUARD

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-35</b>	REV <b>3</b>
MAT'L 6061	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH
.X ± .1	CLEAR ANODIZE
ANGLES ± 5°	SPEC MIL-A-8625F, TYPE II, CLASS I
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/5/2014
SHEET 17 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	-39 INCREASED Ø BY 6" AND HEIGHT BY 5-5/8, CHG. MATERAIL TO SS FROM STEEL. ADDED INSIDE CONE RING -46.	1/26/2015	DPD	JAG



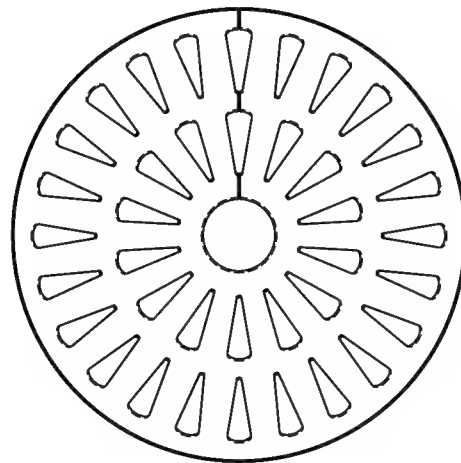
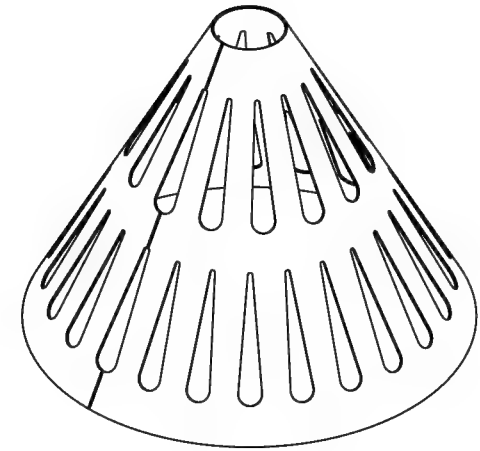
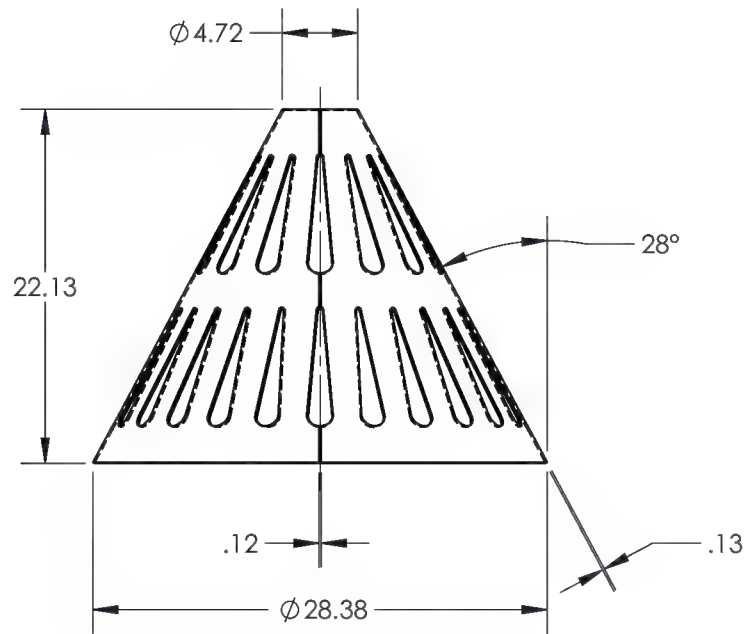
DETAIL B  
SCALE 1 : 2

-39  
CONE WELDMENT

<b>DART AEROSPACE</b>	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-39</b>	REV <b>3</b>
MAT'L <b>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1</b>	DRAWN BY: <b>GILBERT</b> APPROVED <i>D Weil</i> HEAT TREAT FINISH SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE <b>1:10</b>	DATE <b>8/5/2014</b>
SHEET 18 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	-41 INCREASED Ø BY 6" AND HEIGHT BY 5-5/8, CH'D FROM FULL LENG SLOTS TO 2 ROWS OF SLOTS. CH'D MAT'L WAS STEEL IS S.S.	1/26/2015	DPD	JAG



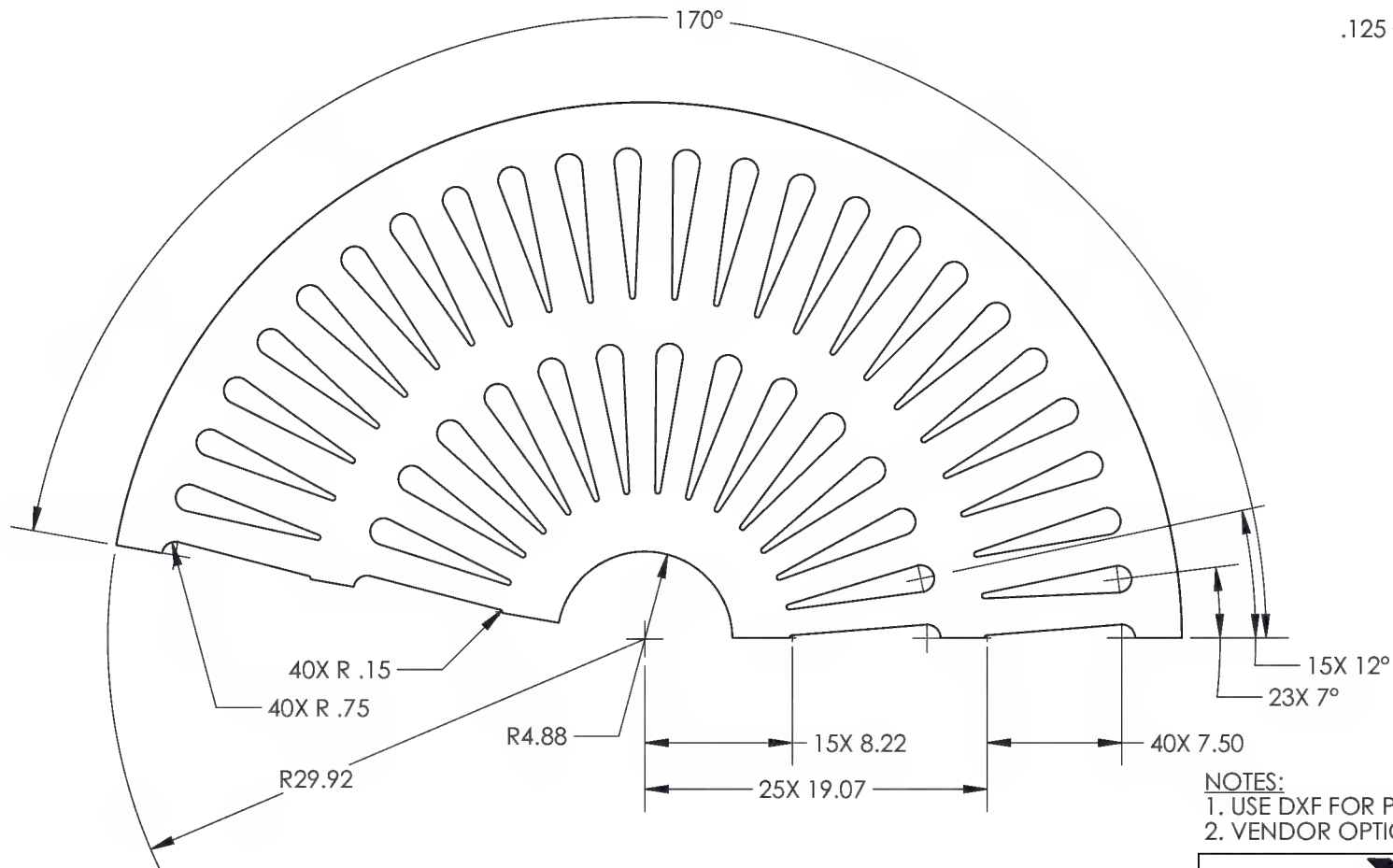
(-41)  
CONE

NOTE:  
VENDOR OPTION: 2 SEAMS OK.

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-41	REV 3
MAT'L 304	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010	HEAT
.XX ± .03	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:12	DATE 10/25/2013
SHEET 19 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	-41A INCREASED Ø BY 6" AND HEIGHT BY 5-5/8, CH'D FROM FULL LENG SLOTS TO 2 ROWS OF SLOTS. CH'D MAT'L WAS STEEL IS S.S.	1/26/2015	DPD	JAG



FLAT PATTERN  
DIMENSIONS FOR REFERENCE ONLY

- NOTES:
1. USE DXF FOR PROFILE
  2. VENDOR OPTION: 2 SEAMS OK.

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-41A	REV 3
MAT'L 304	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT
.XX ± .01	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:10	DATE 10/25/2013
SHEET 20 OF 50	

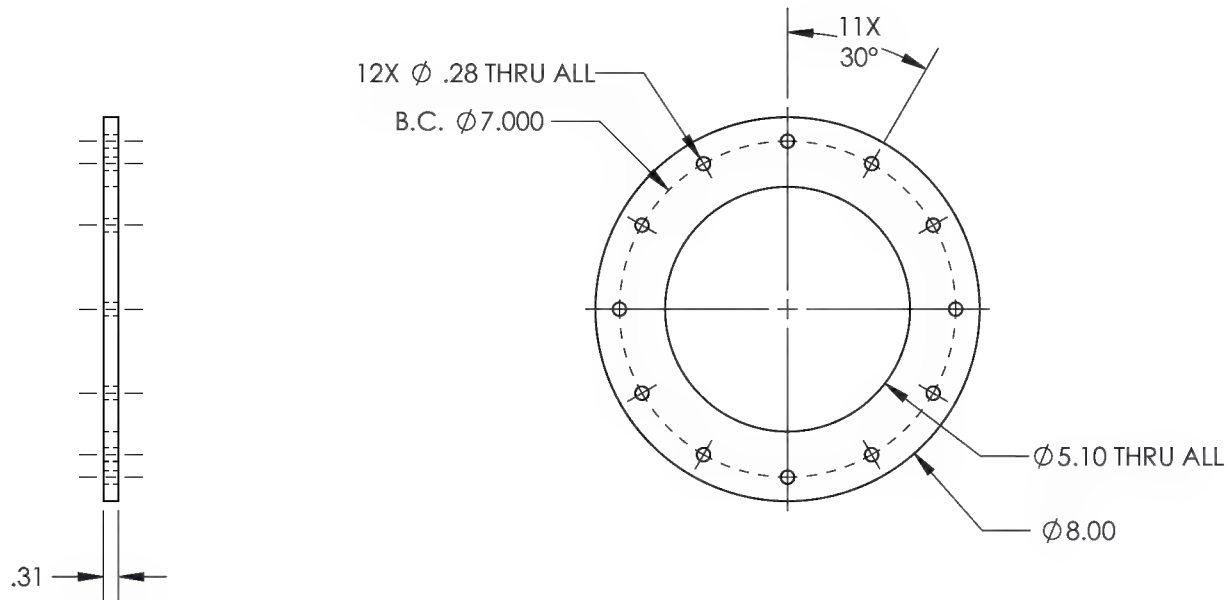
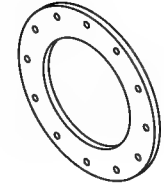
-41A

CONE FLAT PATTERN



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	-43 CH'D MAT'L WAS HR P&O IS 304.	1/7/2015	DPD	JAG



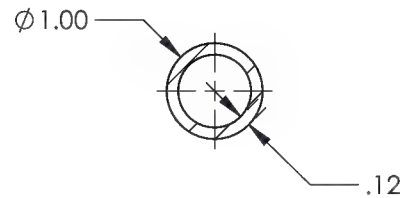
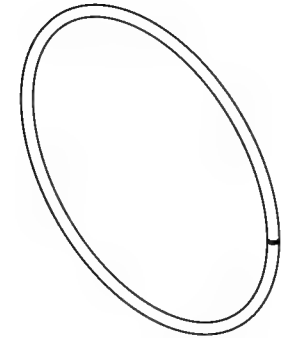
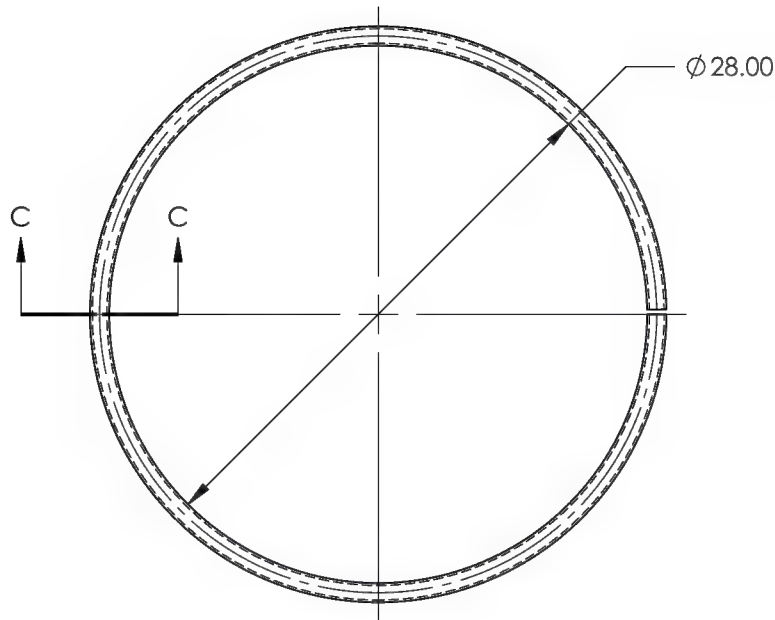
(-43)

CONE FLANGE

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-43</b>	REV <b>3</b>
MAT'L 304	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE 8/5/2014
SHEET 21 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	-45 INCREASED Ø BY 6", CHG. MATERIAL TO SS FROM STEEL	1/27/2015	DPD	JAG



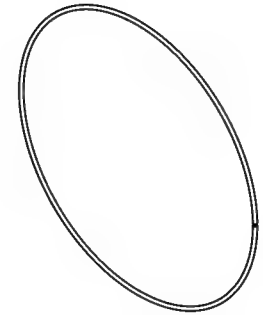
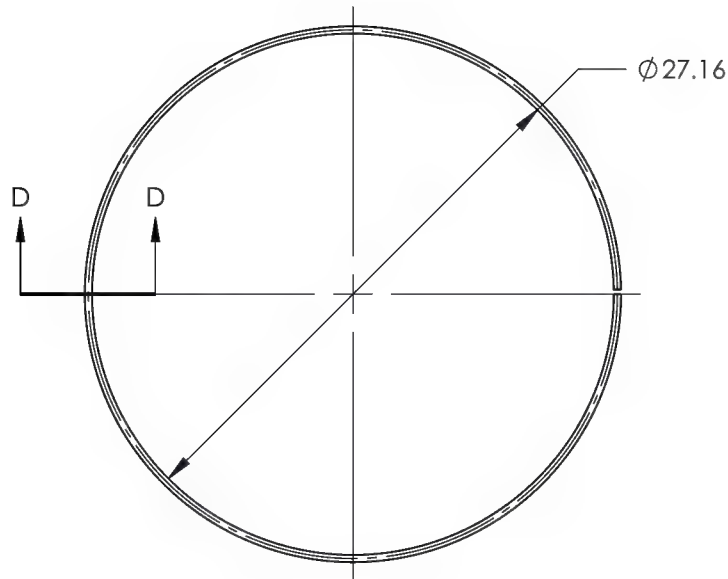
SECTION C-C  
SCALE 1 : 2

(-45)  
CONE RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-45</b>	REV <b>3</b>
MAT'L 304	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT
.XX ± .03 ANGLES ± 5°	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:10	DATE 8/5/2014
SHEET 22 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1	14-0212	-46 ADDED PART.	1/27/2015	DPD	JAG



SECTION D-D  
SCALE 1 : 1

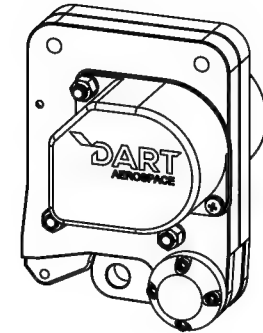
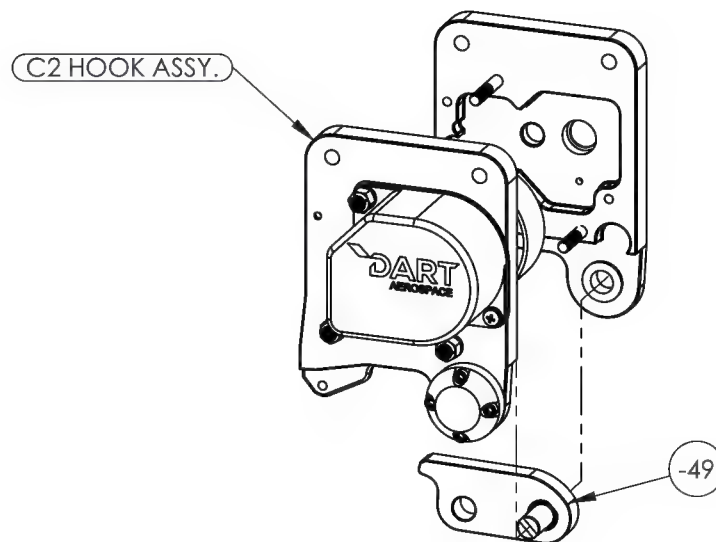
(-46)

INSIDE CONE RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-46</b>	REV <b>3</b>
MAT'L 304	DRAWN BY: DUERFELDT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>J Gilbert</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT
.XX ± .03 ANGLES ± 5°	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:10	DATE 1/27/2015
SHEET 23 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-47 DELETED -53, AND TAPPED HOLE, AND VIEW SHOWING TAPPED HOLE	2/11/2015	PMW	JAG



NOTE:  
USE SAME PARTS BOM AS C2 EXCEPT REPLACE C2-4-4A WITH -49 AS SHOWN.  
ALSO, DO NOT USE THE FOLLOWING C2 PARTS:

QTY	PN	DESC.
1	C2-9-2	CLOCK SPRING
1	C2-13-4	KEEPER
1	C2-13-5	KEEPER SPRING
1	AN3-14A	KEEPER SHAFT BOLT
2	AN960-10L	WASHER FOR KEEPER
1	MS21083N3	NUT FOR KEEPER

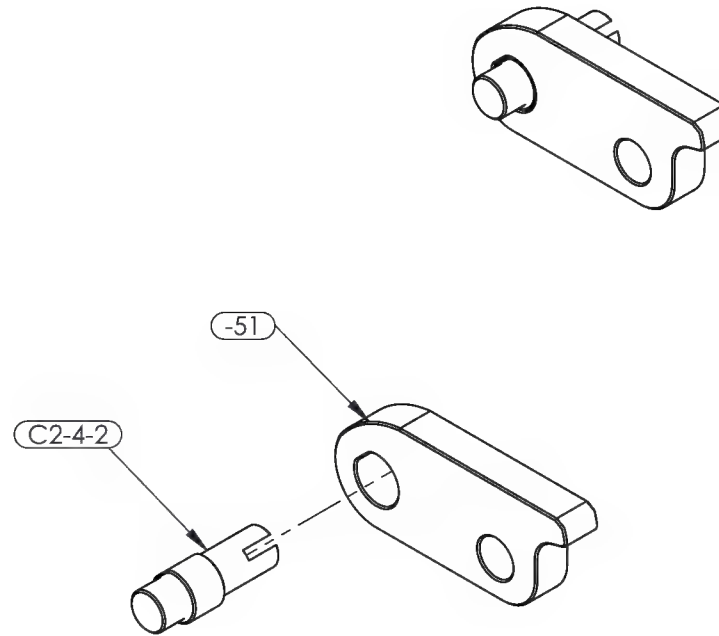
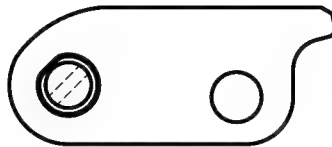
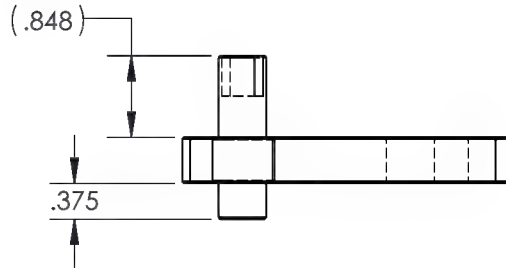
-47  
C2-VCT-5 HOOK ASSY

<b>DART AEROSPACE</b>	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-47</b>	REV <b>3</b>
MAT'L	DRAWN BY: <b>CANAM</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>J Gilbert</i>
.XXX ± .005	HEAT
.XX ± .01	TREAT
.X ± .1	FINISH
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE <b>1:4</b>	DATE
SHEET 24 OF 50	



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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



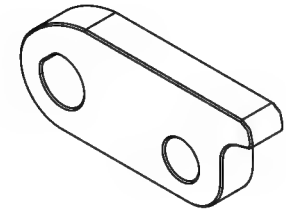
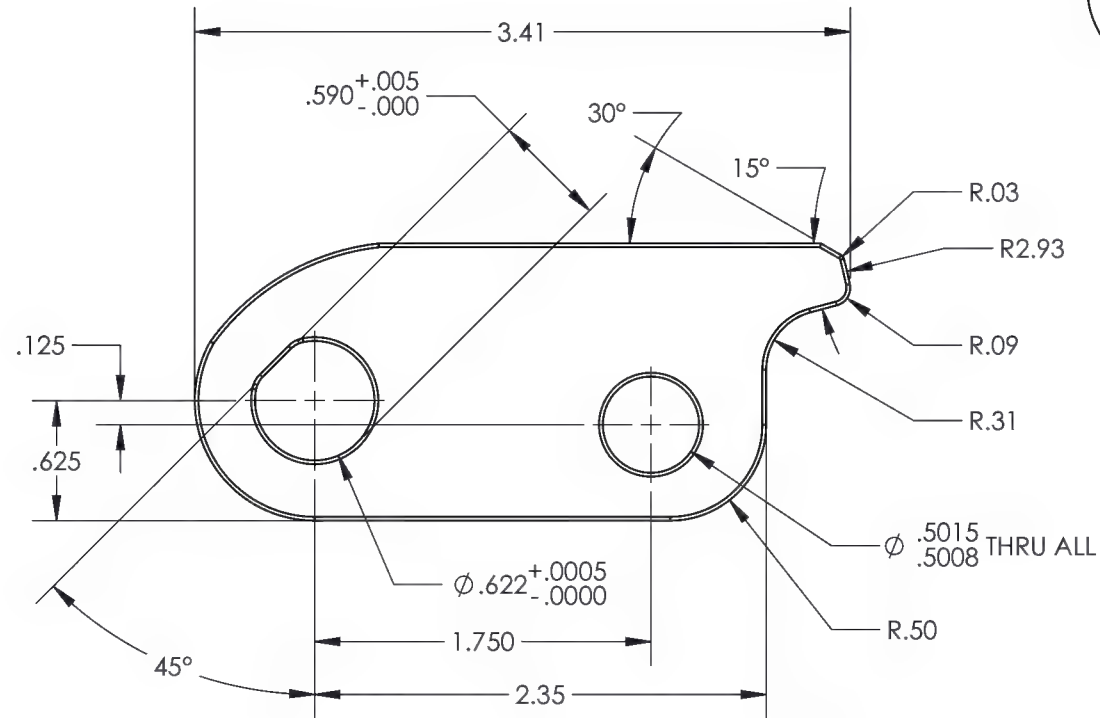
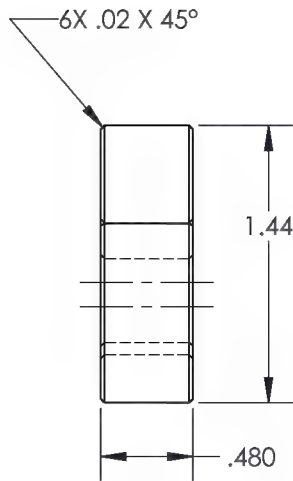
NOTE:  
1. NICKEL PLATE .0009 - .0011, BAKE AFTER PLATING.

(-49)  
LOAD BEAM ASSEMBLY

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-49	REV 3
MAT'L	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .005	HEAT TREAT
.XX ± .01	FINISH SEE NOTE 1
.X ± .1	ANGLES ± 5°
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:2	DATE 7/7/2014
SHEET 25 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-51 CH'D DIM WAS LIMITS Ø.4385-.4389 THRU ALL IS LIMITS Ø.5008-.5015 THRU ALL. ADDED DIMS .625, 45°. ADDED USE DXF PROFILE FOR CONTOURS NOTE.	2/11/2015	PMW	JAG

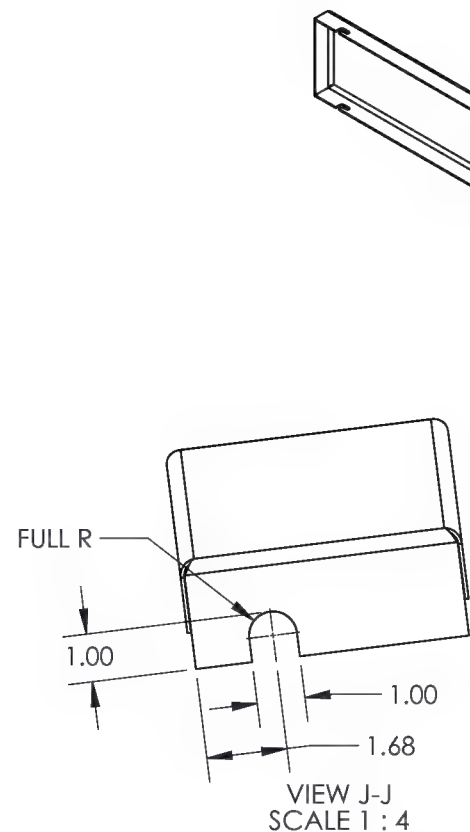


- NOTES:
1. NICKEL PLATE AFTER ASSEMBLY.
  2. USE DXF PROFILE FOR CONTOURS.


(-51)  
LOAD BEAM

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-51</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P. Weil</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 53-56
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 7/7/2014
SHEET 26 OF 50	

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-55 REDESIGNED.	2/11/2015	PMW	JAG
3	15-0326	-55 ADDED MISSING DIM 1.68, CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020.	10/8/2015	RJC	JAG

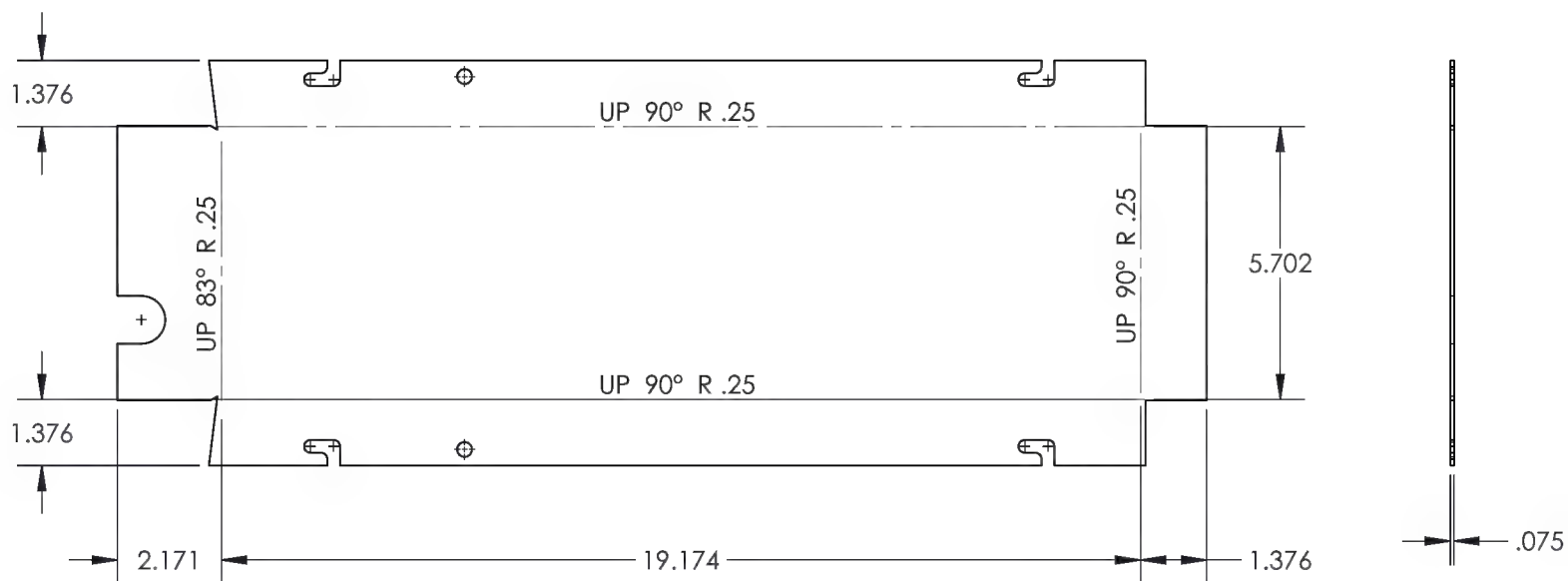


NOTE:  
WELD AND GRIND ALL SEAMS AND CORNERS.

		
TITLE VERTICAL CAPTURE TRANSPORT		
DWG NO. VCT-5-55		REV 3
MAT'L 1018/1020		DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1		APPROVED <i>D Weil</i> HEAT TREAT FINISH POWDER COAT LIME GREEN SPEC
1. BREAK ALL SHARP EDGES .015 x .45" OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		USED ON MODEL
SCALE 1:8	DATE 8/5/2014	SHEET 27 OF 50

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REVISIONS			
REV	ECR	DESCRIPTION	DATE



FLAT PATTERN  
DIMENSIONS FOR REFERENCE ONLY

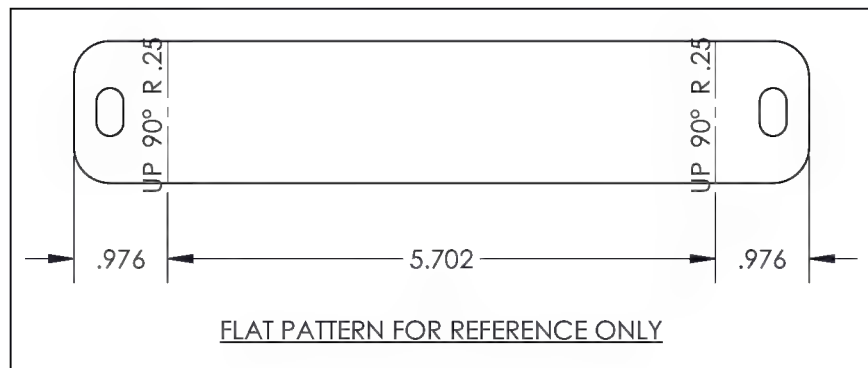
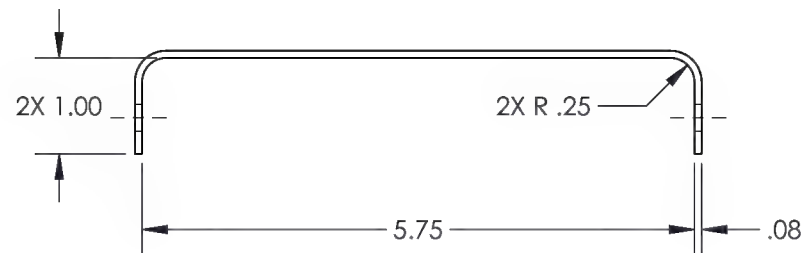
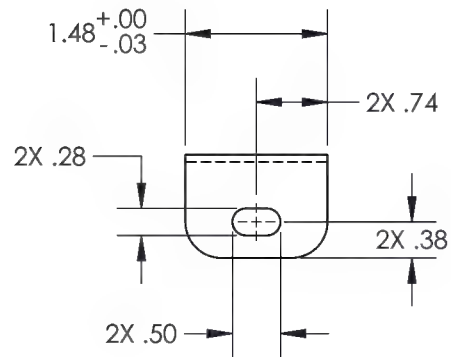
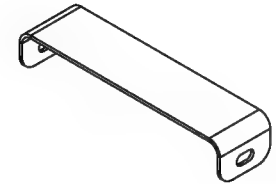
-55A

COVER FLAT PATTERN

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-55A</b>	REV <b>3</b>
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH POWDER COAT LIME GREEN
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE 8/5/2014
SHEET 28 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0326	-57 CH'D DIM WAS 1.50 IS 1.48 +.00 -.03, CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020.	9/28/2015	RJC	JAG



(-57)

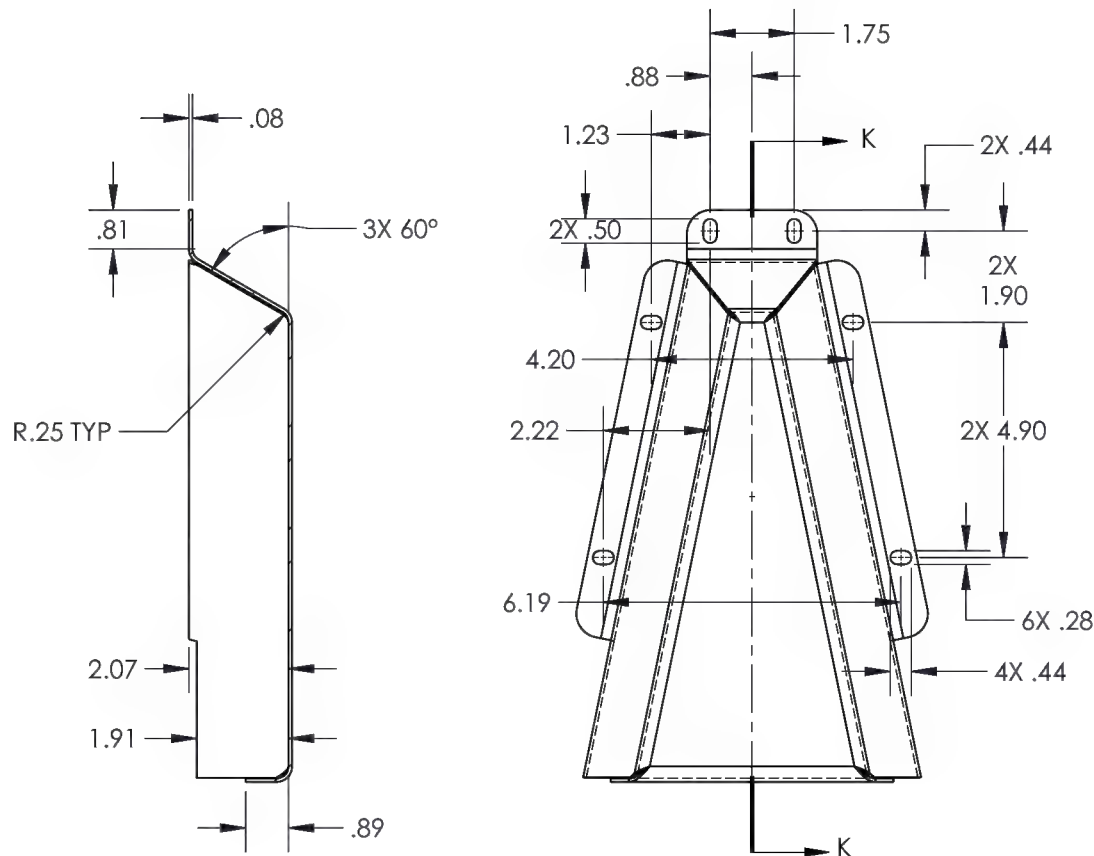
CENTER COVER

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-57</b>	REV <b>3</b>
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH POWDER COAT LIME GREEN
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/7/2014 SHEET 29 OF 50

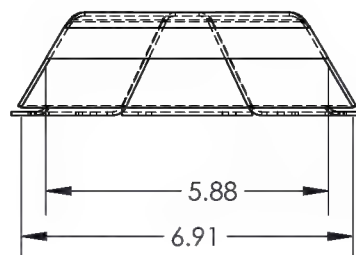


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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-59 CH'D DIMS WAS 1.90 IS 2X 1.90, WAS 60° IS 3X 60°. ADDED DIMS 1.23, 2.22, 4.20, 6.19, 2X .44, R.25	2/11/2015	PMW	JAG
3	15-0326	-59 CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020.	10/8/2015	RJC	JAG

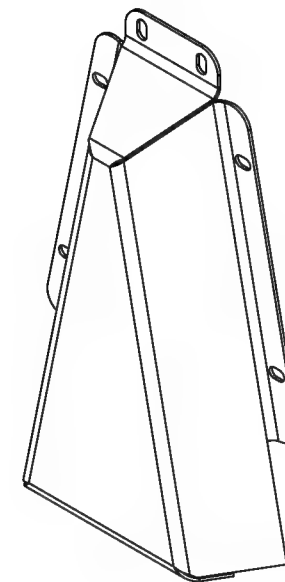


SECTION K-K



-59

SIDE COVER

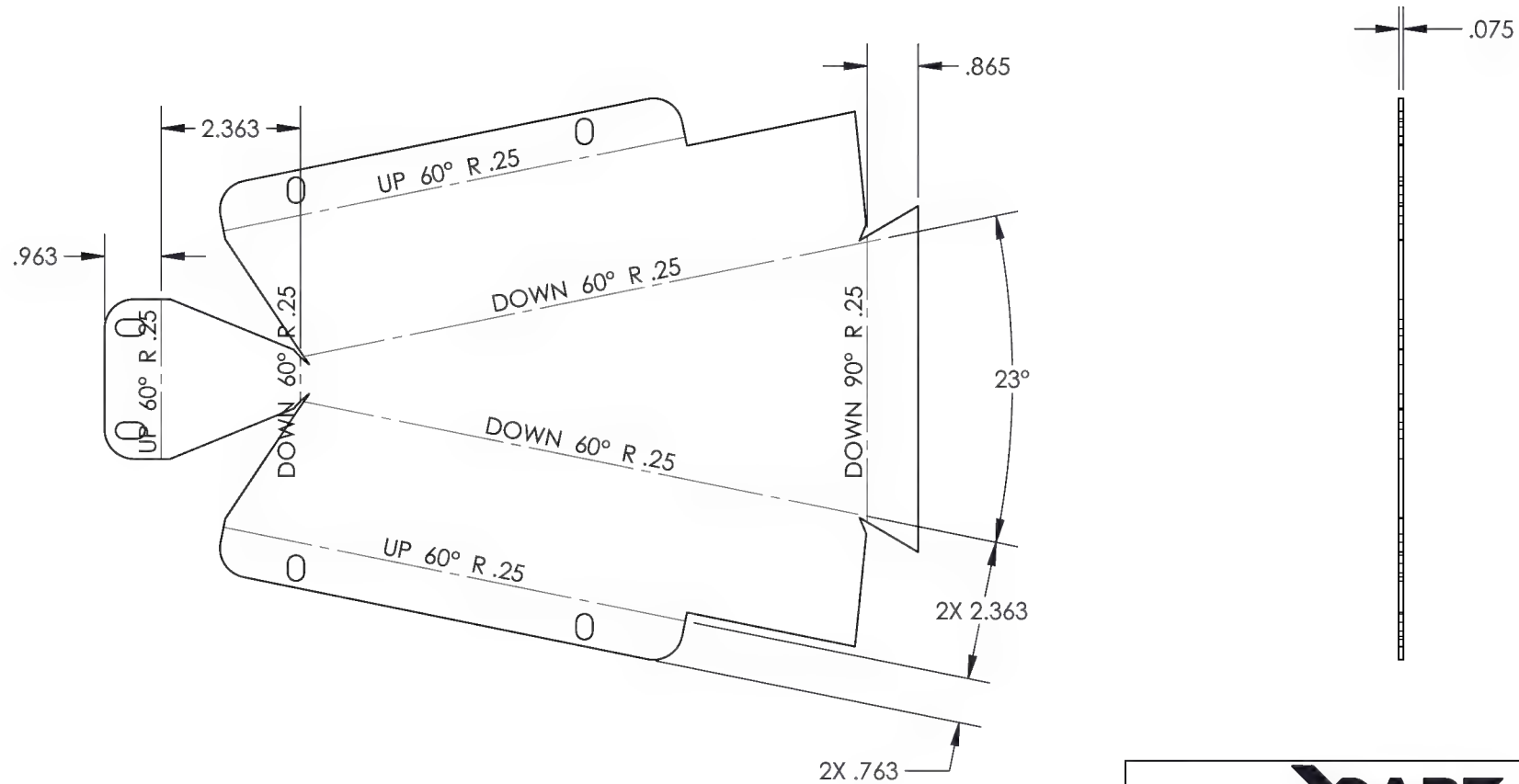


NOTE:  
WELD AND GRIND ALL SEAMS AND CORNERS.

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-59</b>	REV <b>3</b>
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010	HEAT TREAT
.XX ± .03	FINISH POWDER COAT LIME GREEN
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE 8/5/2014
SHEET 30 OF 50	

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED



FLAT PATTERN  
DIMENSIONS FOR REFERENCE ONLY

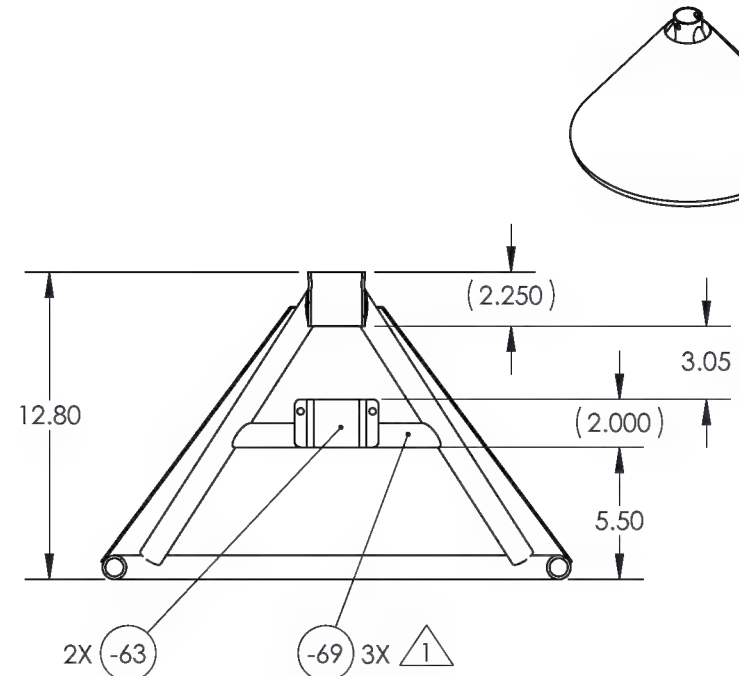
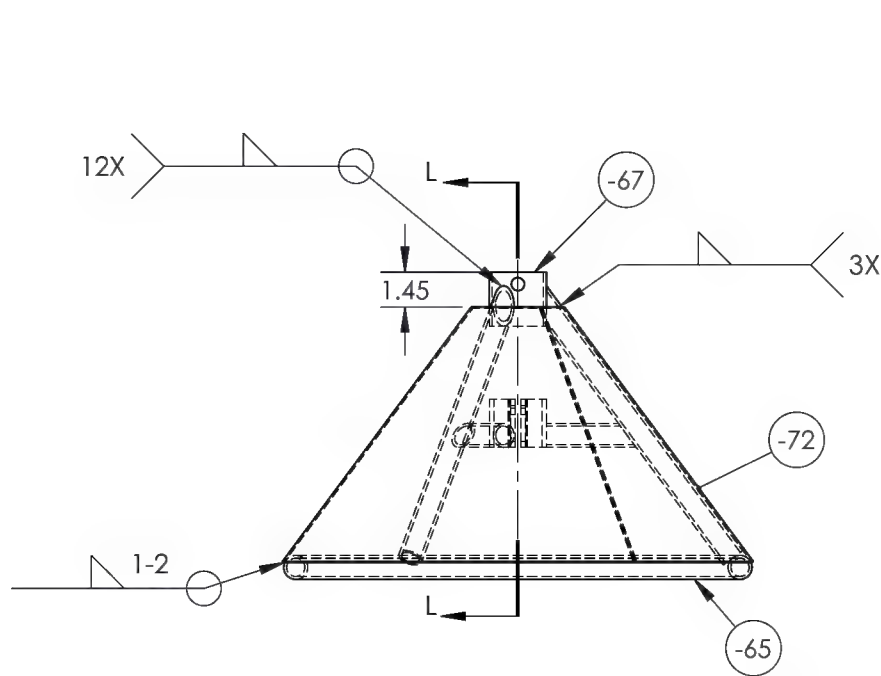
-59A

SIDE COVER

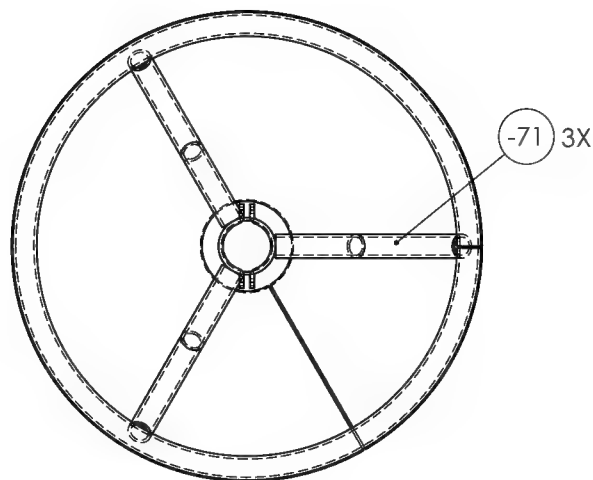
<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-59A	REV 3
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH POWDER COAT LIME GREEN
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:3	DATE 8/5/2014
SHEET 31 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-61 REDESIGNED.	2/11/2015	PMW	JAG
3	15-0326	-61 CH'D FINISH WAS SAFETY ORANGE IS SAFETY YELLOW, ADDED NOTE 1.	9/28/2015	RJC	JAG



SECTION L-L



-61  
TRIPOD ASSY

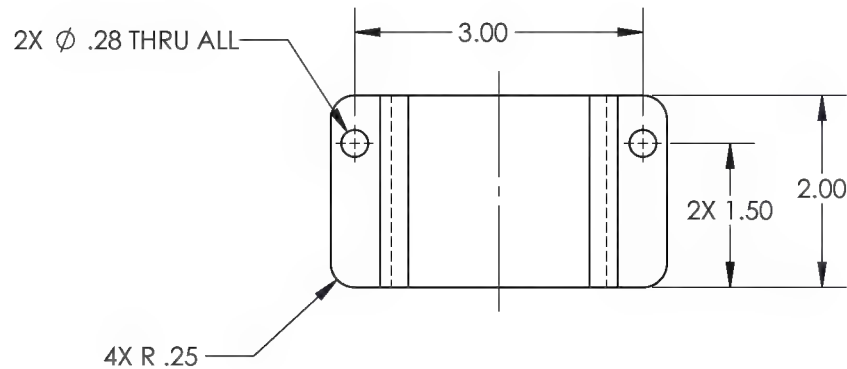
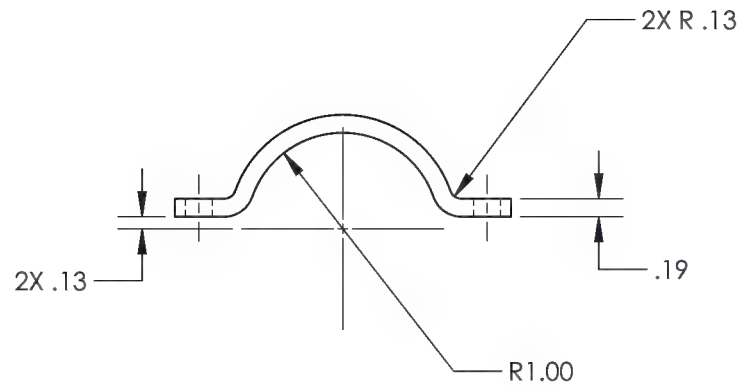
NOTE:

1 COPE -69 AS REQUIRED.

<b>DART AEROSPACE</b>	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-61</b>	REV <b>3</b>
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1	DRAWN BY: <b>GILBERT</b> APPROVED <i>D Weil</i> HEAT TREAT FINISH POWDER COAT SPEC SAFETY YELLOW USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE <b>1:8</b>	DATE <b>8/5/2014</b>
SHEET 32 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0326	-63 CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020.	10/8/2015	RJC	JAG



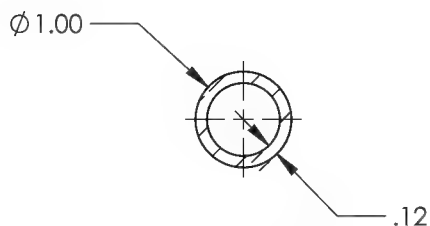
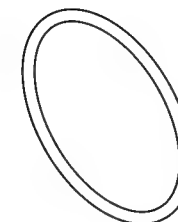
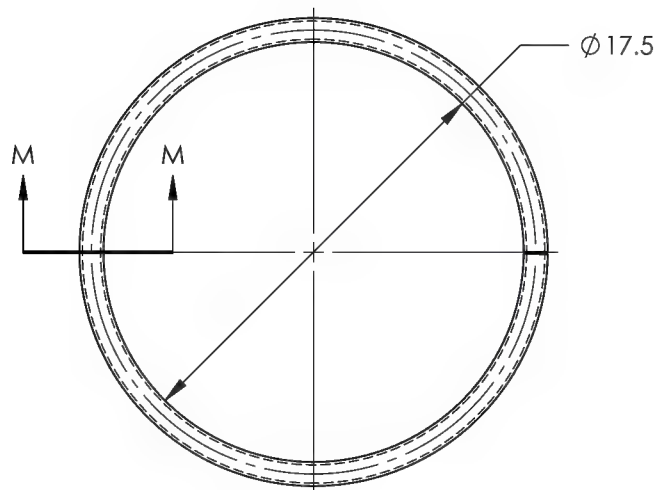
(-63)

HALF RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-63</b>	REV <b>3</b>
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH SEE -61 WELDMENT
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/5/2014 SHEET 33 OF 50

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-65 REDESIGNED.	2/11/2015	PMW	JAG



SECTION M-M  
SCALE 1 : 2

-65

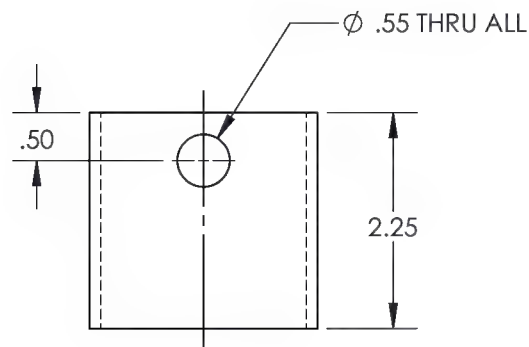
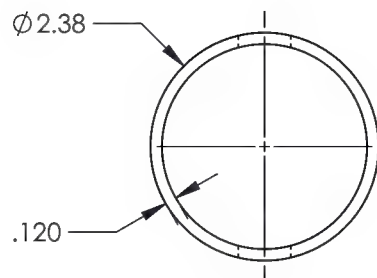
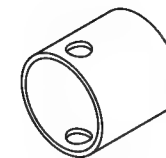
SMALL HOOP

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-65</b>	REV <b>3</b>
MAT'L CDS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1	DRAWN BY: <b>GILBERT</b> APPROVED <i>D Weil</i> HEAT TREAT FINISH SEE -61 WELDMENT SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:8	DATE 8/5/2014
SHEET 34 OF 50	



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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-67 CH'D MAT'L WAS STEEL IS CDS.	2/11/2015	PMW	JAG



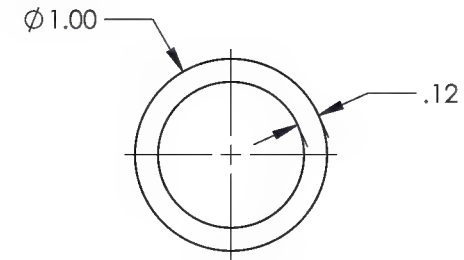
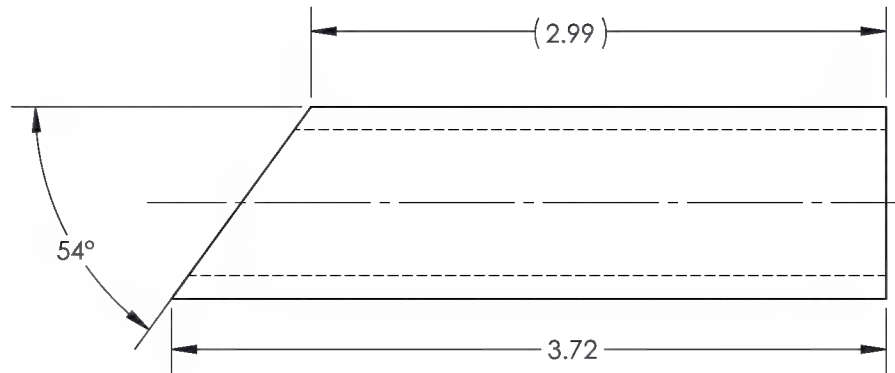
(-67)

TOP RING

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-67</b>	REV <b>3</b>
MAT'L CDS	DRAWN BY: <b>GILBERT</b>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010	HEAT TREAT
.XX ± .03	FINISH SEE -61 WELDMENT
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 8/5/2014 SHEET 35 OF 50

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-69 REDESIGNED.	2/11/2015	PMW	JAG



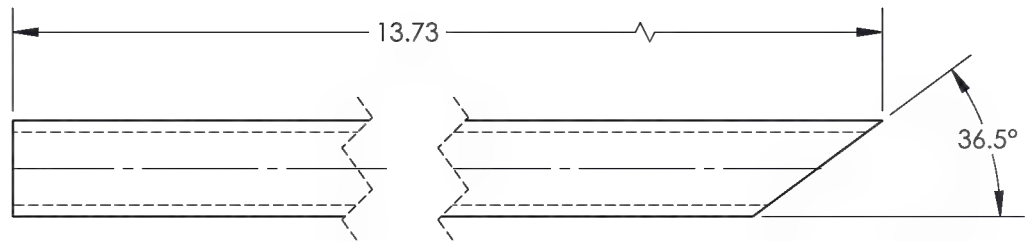
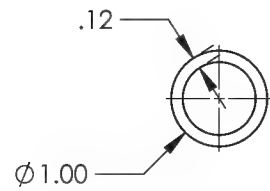
(-69)

SUPPORT TUBE

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-69</b>	REV <b>3</b>
MAT'L CDS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1	DRAWN BY: <b>GILBERT</b> APPROVED <i>D Weil</i> HEAT TREAT FINISH SEE -61 WELDMENT SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:2	DATE 8/5/2014 SHEET 36 OF 50

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-71 REDESIGNED.	2/11/2015	PMW	JAG

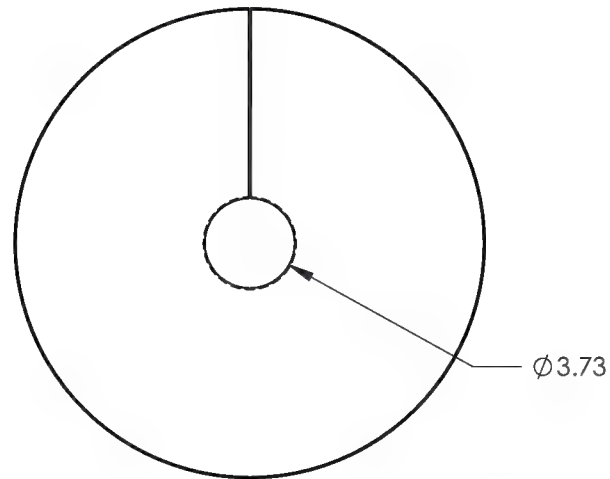
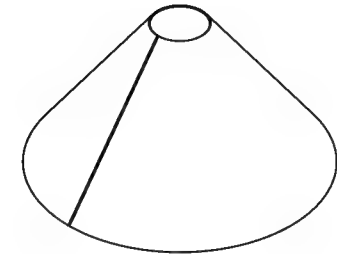
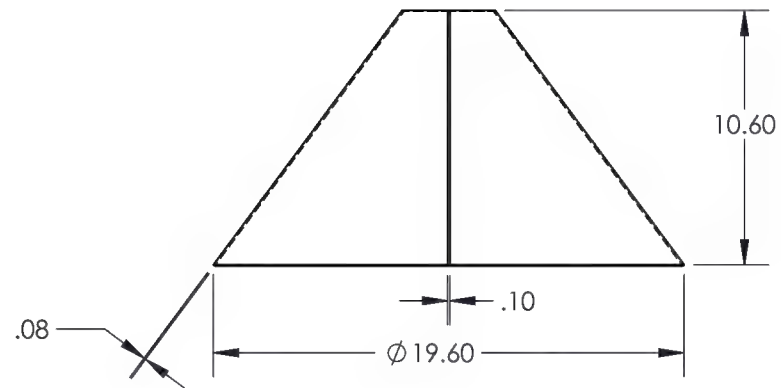


(-71)  
UPRIGHT TUBE

<b>DART AEROSPACE</b>	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-71</b>	REV <b>3</b>
MAT'L CDS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1	DRAWN BY: <b>GILBERT</b> APPROVED <i>D Weil</i> HEAT TREAT FINISH SEE -61 WELDMENT SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE <b>1:2</b>	DATE <b>8/5/2014</b>
SHEET 37 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-72 SHEET ADDED.	2/11/2015	PMW	JAG
3	15-0326	-72 CH'D DIM WAS Ø19.48 IS Ø19.60.	10/7/2015	RJC	JAG



(-72)

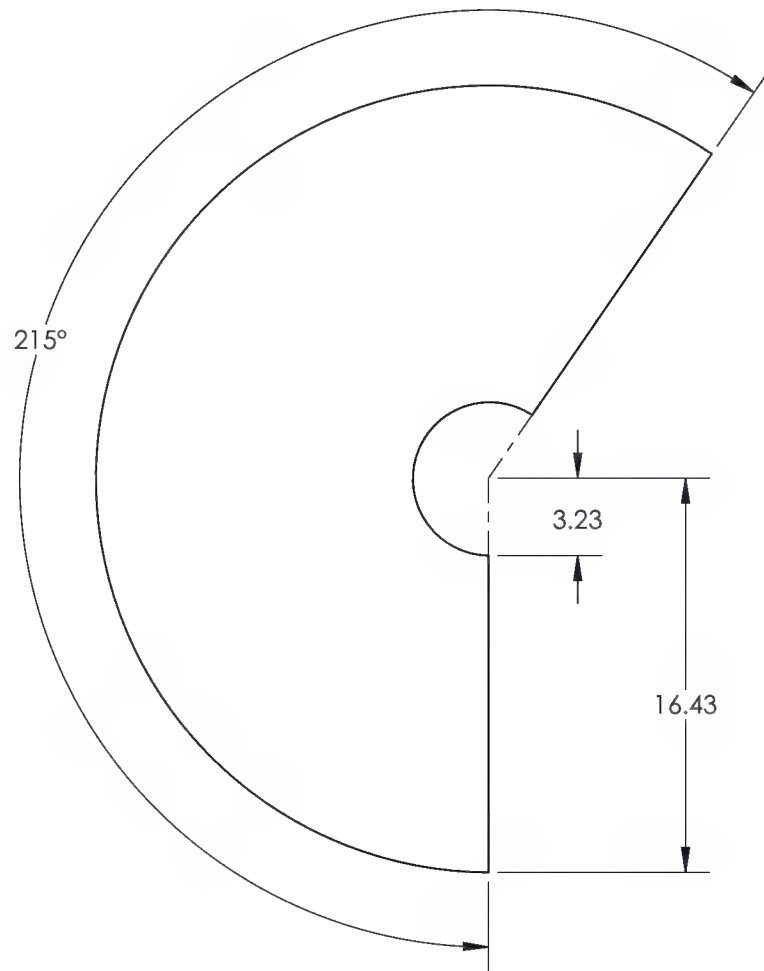
SHROUD, TRIPOD

NOTE:  
1. VENDOR OPTION; TWO SEAMS OK.

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-72</b>	REV <b>3</b>
MAT'L HR P&O UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8 .XX ± .03 ANGLES ± 5° .X ± .1	DRAWN BY: <b>WALLRICH</b> APPROVED <i>J Gilbert</i> HEAT TREAT FINISH SEE -61 WELDMENT SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:8	DATE 2/9/2015 SHEET 38 OF 50

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	PMW	-72A SHEET ADDED.	2/11/2015	PMW	JAG

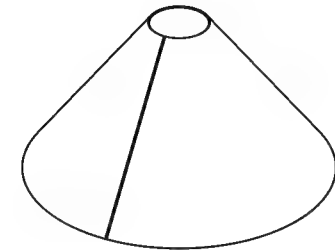


FLAT PATTERN  
FOR REFERENCE ONLY

-72A

SHROUD FLAT PATTERN, TRIPOD

(.075)

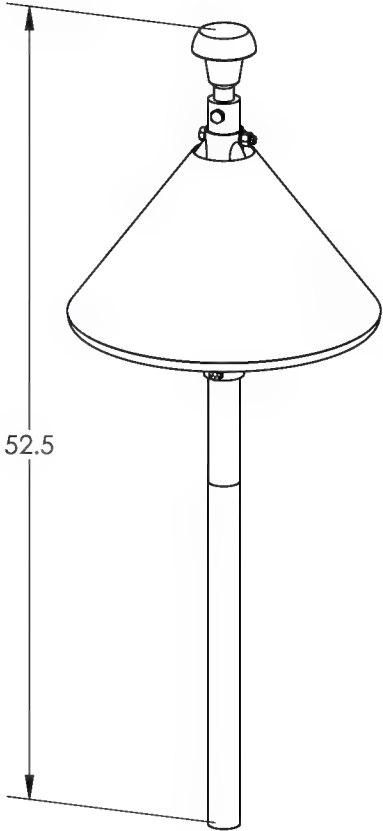
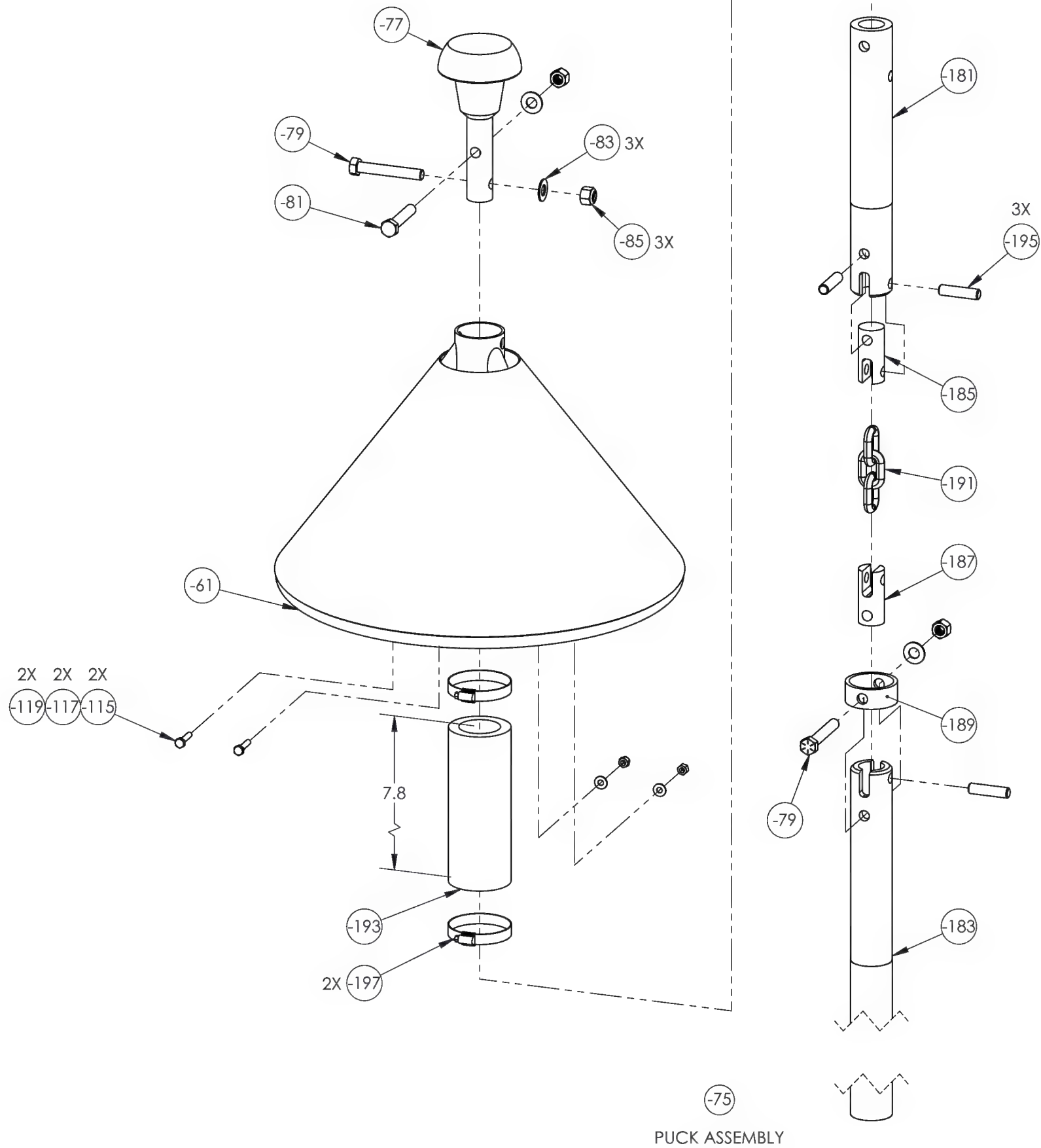


- NOTES:  
1. USE DXF FOR PROFILE  
2. VENDOR OPTION: 2 SEAMS OK

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-72A	REV 3
MAT'L HR P&O	DRAWN BY: WALLRICH
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>J Gilbert</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH SEE -61 WELDMENT
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:8	DATE 2/9/2015 SHEET 39 OF 50

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
3	15-0326	-75 ADDED OVERALL HEIGHT 52.5 DIM.	9/28/2015	RJC

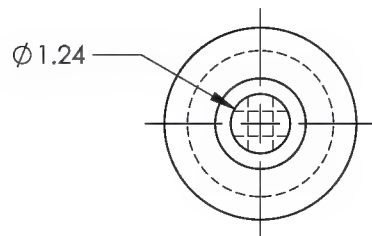
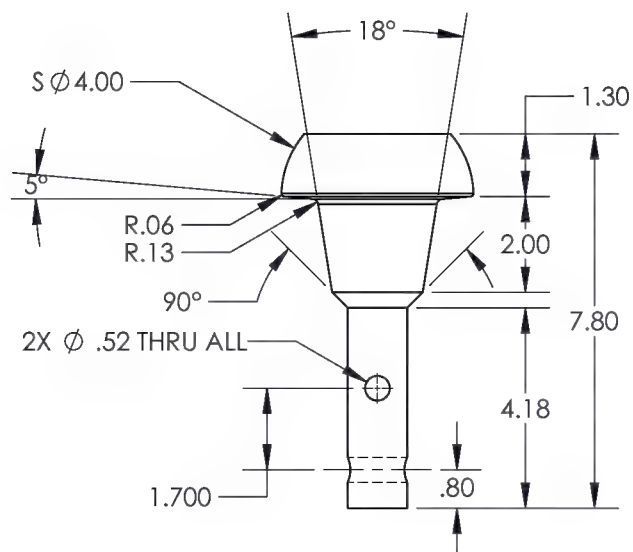


DART AEROSPACE		
TITLE VERTICAL CAPTURE TRANSPORT		
DWG NO. VCT-5-75		REV 3
MATERIAL UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		DRAWN BY: GILBERT APPROVED: <i>D Weil</i> TREAT FINISH SPEC USED ON MODEL
SCALE 1:6	DATE 8/6/2014	SHEET 40 OF 50



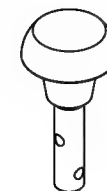
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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL



-77

ANCHOR



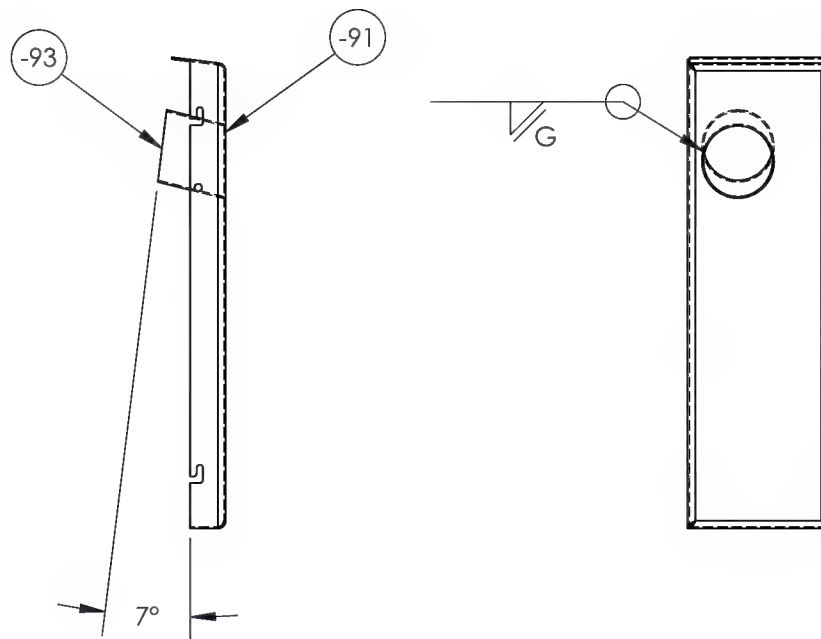
NOTE:

1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-77</b>	REV <b>3</b>
MAT'L 4140 Q&T/4142 Q&T	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P Walbrich</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE 1
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE 8/5/2014
SHEET 41 OF 50	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



NOTE:  
CENTER TUBE IN OPENING OF COVER AS SHOWN.

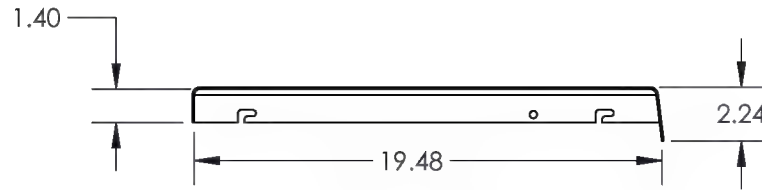
-89

COVER ASSY-SOLENOID SIDE

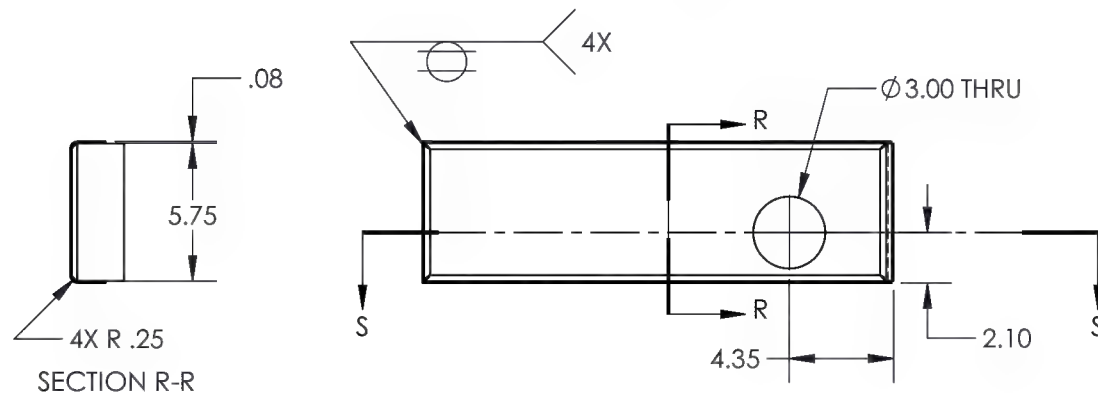
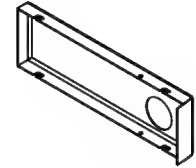
<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-89	REV 3
MAT'L	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010	HEAT
.XX ± .03	TREAT
.X ± .1	FINISH POWDER COAT LIME GREEN
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	SPEC
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL
SCALE 1:8	DATE 8/7/2014
SHEET 42 OF 50	

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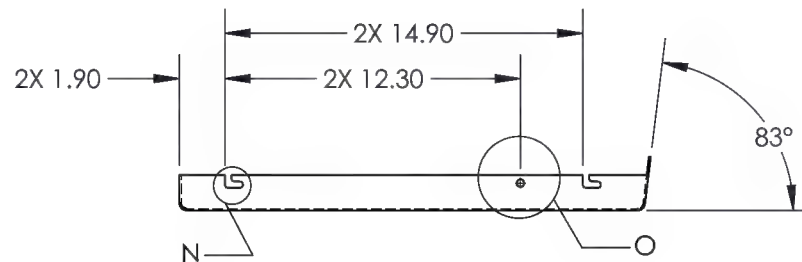
REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-91 REDESIGNED.	2/11/2015	PMW	JAG
3	15-0326	-91 CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020.	10/8/2015		



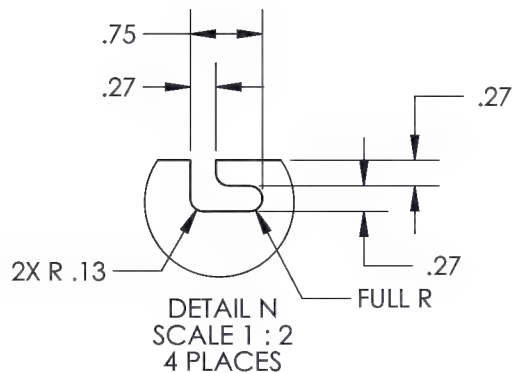
SECTION S-S



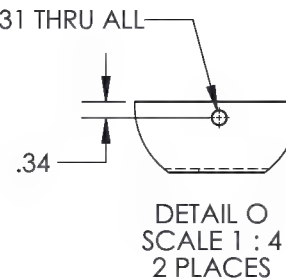
SECTION R-R



COVER-SOLENOID SIDE



DETAIL N  
SCALE 1 : 2  
4 PLACES



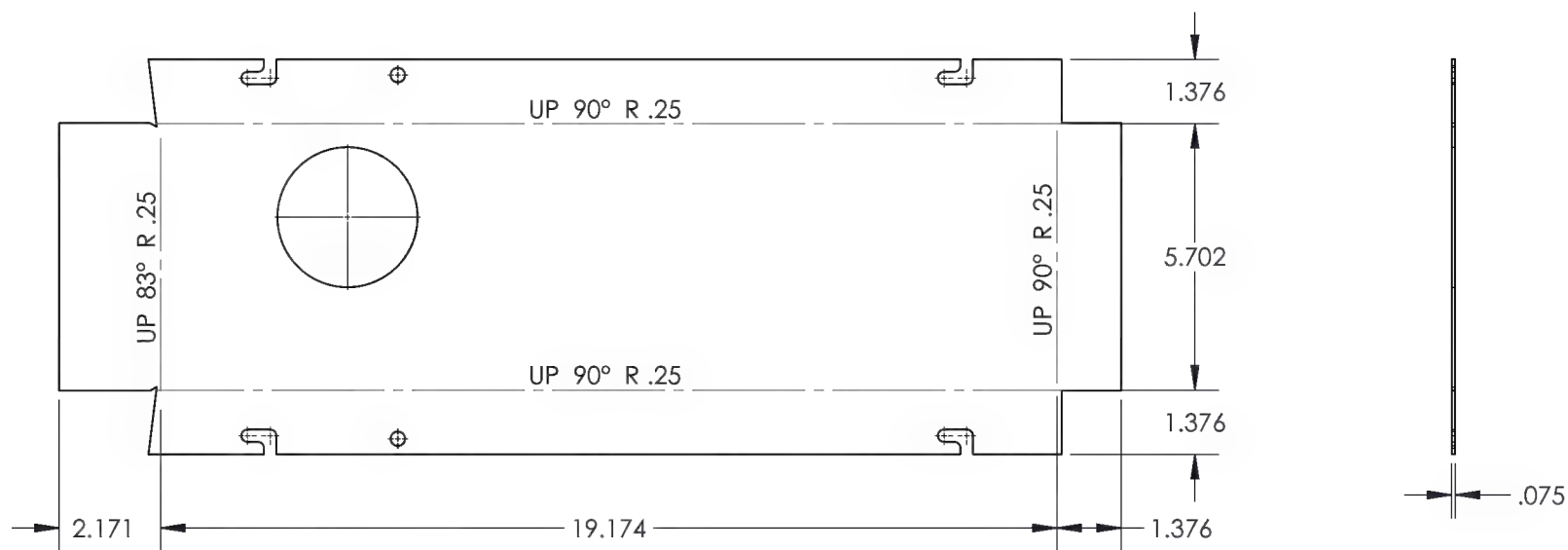
DETAIL O  
SCALE 1 : 4  
2 PLACES

NOTE:  
WELD AND GRIND ALL SEAMS AND CORNERS.

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-91</b>	REV <b>3</b>
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH SEE WELDMENT -89
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:8	DATE 8/5/2014
SHEET 43 OF 50	

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REVISIONS			
REV	ECR	DESCRIPTION	DATE
			INITIAL
			APPROVED



FLAT PATTERN  
DIMENSIONS FOR REFERENCE ONLY

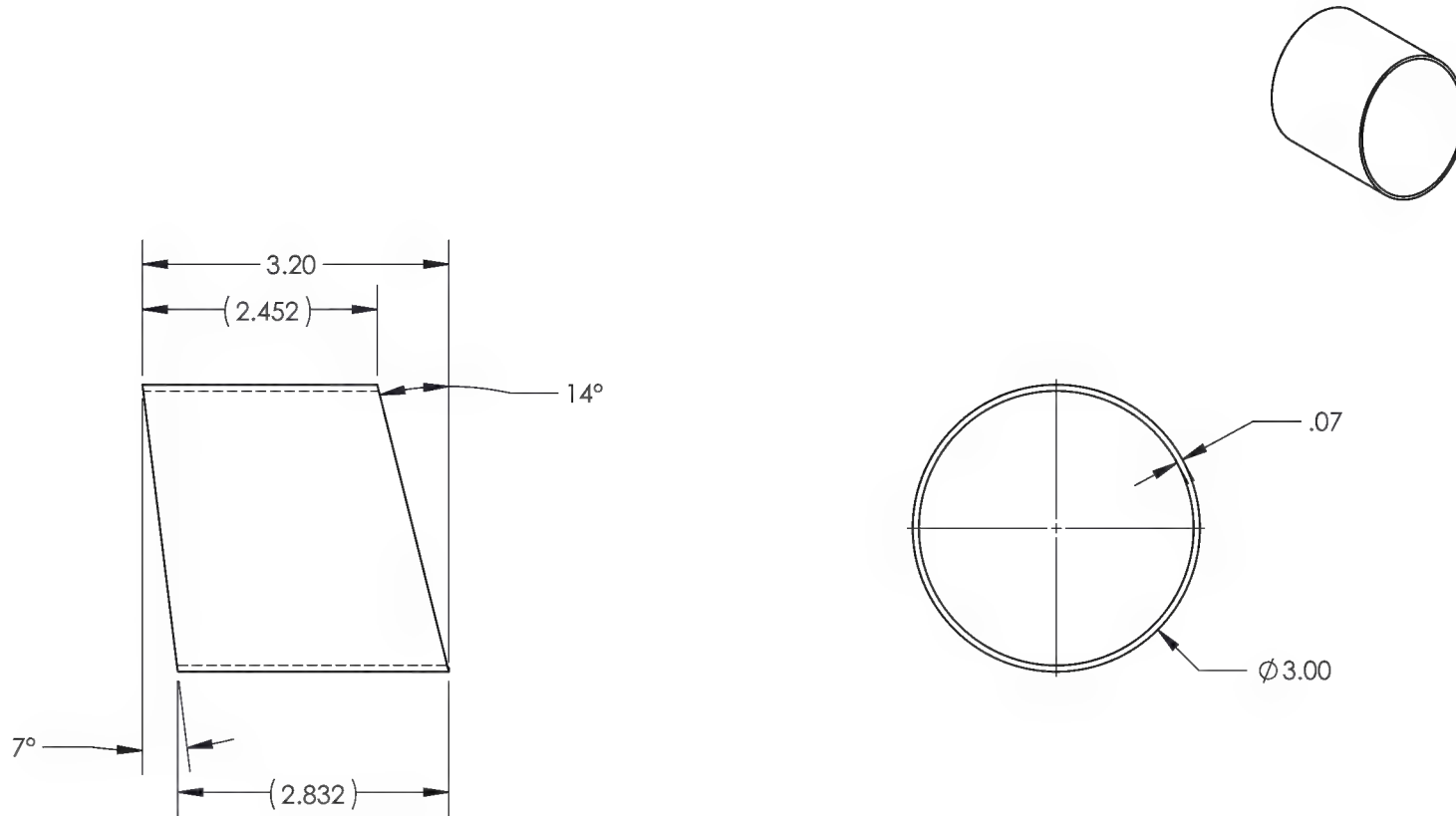
-91A

COVER-SOLENOID SIDE FLAT PATTERN

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-91A	REV 3
MAT'L 1018/1020	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8	HEAT TREAT
.XX ± .03 ANGLES ± 5°	FINISH SEE WELDMENT -89
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:4	DATE 8/5/2014
SHEET 44 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-93 DIM WAS 3.13 IS 3.20.	2/11/2015	PMW	JAG
3	15-0326	-93 CH'D MATERIAL CALLOUT WAS 1018 IS 1018/1020.	10/8/2015	RJC	JAG



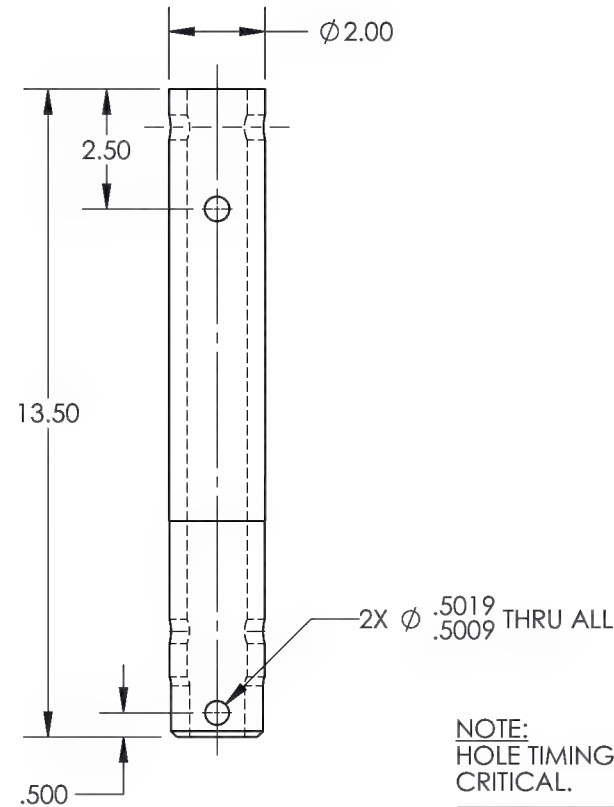
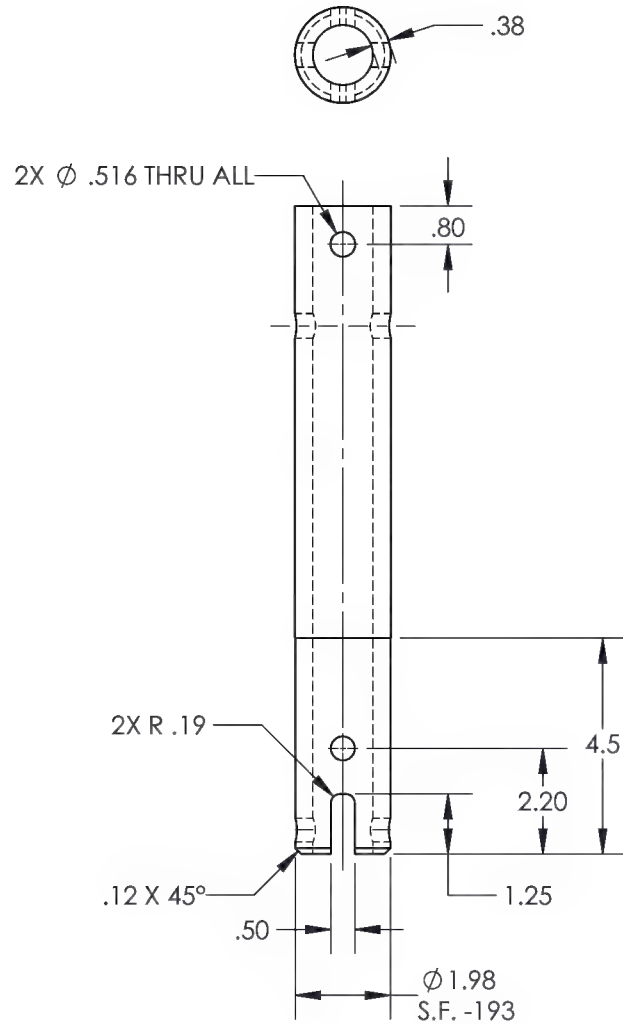
(-93)

COVER TUBE

<b>DART AEROSPACE</b>		
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>		
DWG NO. <b>VCT-5-93</b>		REV <b>3</b>
MAT'L 1018/1020		DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		APPROVED <i>D Weil</i>
.XXX ± .010 FRACTIONS ± 1/8		HEAT TREAT
.XX ± .03 ANGLES ± 5°		FINISH SEE WELDMENT -89
.X ± .1		SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R		USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		
SCALE 1:2	DATE 8/7/2014	SHEET 45 OF 50

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-181 ADDED DIMS .12 X 45°, Ø1.98 S.F. -193, 4.5. ADDED HOLE TIMING NOTE. ADDED FINISH POWDER COAT SAFETY ORANGE.	2/11/2015	PMW	JAG
3	15-0326	-181 CH'D FINISH WAS POWDER COAT SAFETY ORANGE IS POWDER COAT SAFETY YELLOW.	9/28/2015	RJC	JAG



NOTE:  
HOLE TIMING BETWEEN  $\phi .516$  &  $\phi .5009$  IS NOT CRITICAL.

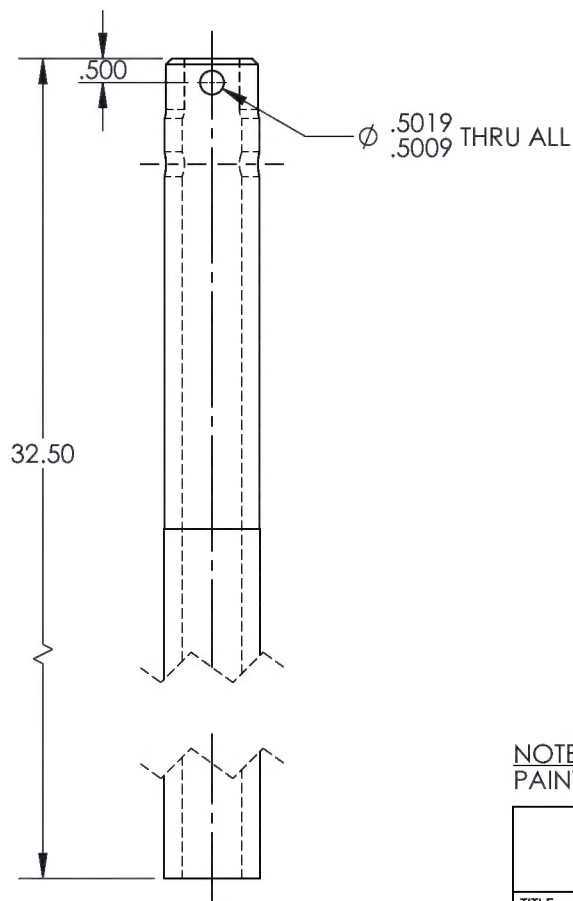
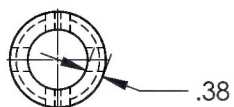
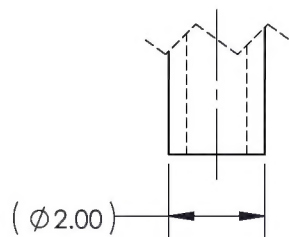
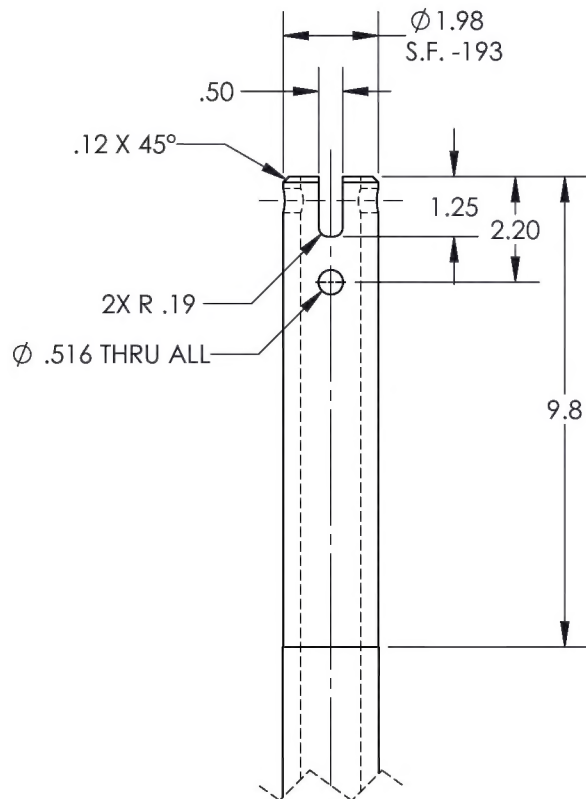
(-181)  
PUCK TUBE UPPER

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-181</b>	REV <b>3</b>
MAT'L CDS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: <b>GILBERT</b> APPROVED <b>P Walbrich</b> HEAT TREAT FINISH POWDER COAT YELLOW SPEC SAFETY YELLOW USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE <b>1:4</b>	DATE <b>8/5/2014</b>
SHEET 46 OF 50	



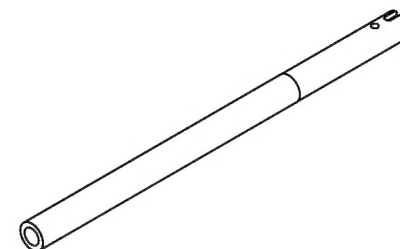
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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-183 ADDED DIMS .12 X 45°, Ø1.98 S.F. -193, 9.8. ADDED FINISH PAINT GRAY OR RED.	2/11/2015	PMW	JAG



(-183)

PUCK TUBE LOWER

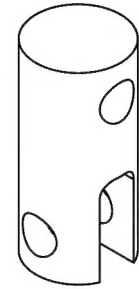
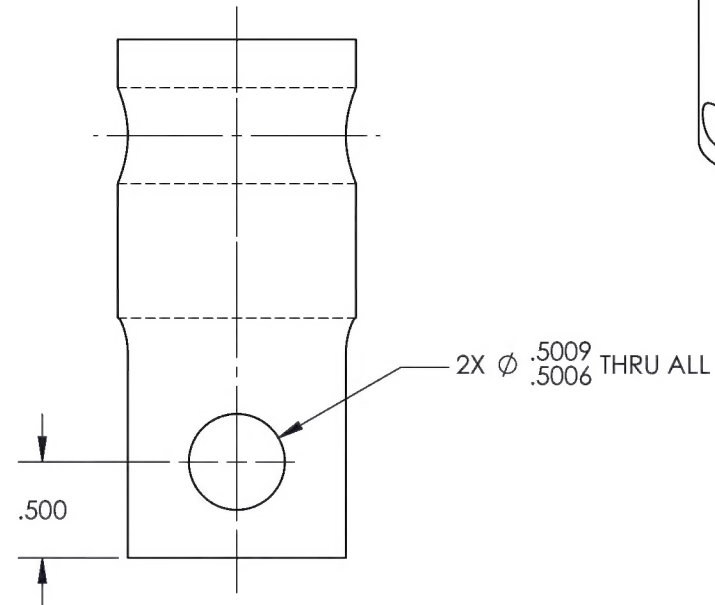
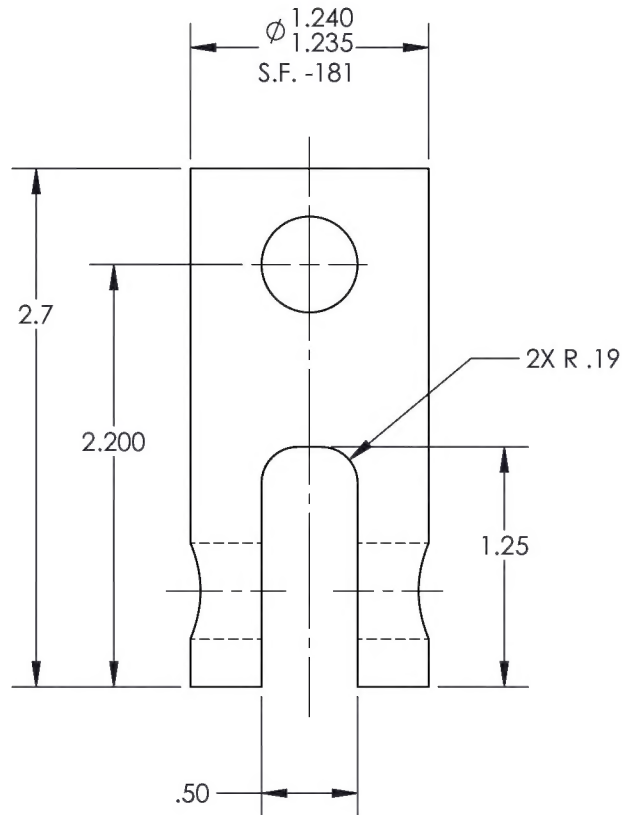


NOTE:  
PAINT GRAY OR RED.

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-183</b>	REV <b>3</b>
MAT'L CDS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: <b>GILBERT</b> APPROVED <b>P Walbrich</b> HEAT TREAT FINISH SEE NOTE SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE <b>1:4</b>	DATE <b>8/5/2014</b>
SHEET 47 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-185 CH'D DIM WAS Ø1.25 S.F. -181 IS Ø1.240(+.000 -.005) S.F. -181, WAS .4985-.4992 IS .5006-.5009 THRU ALL, CH'D MAT'L WAS 1018 IS 4140/4142. ADDED HEAT TREAT RC 35-39. ADDED FINISH PAINT GRAY OR RED.	2/11/2015	PMW	JAG



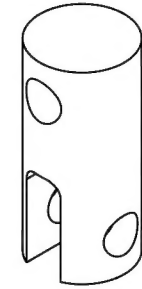
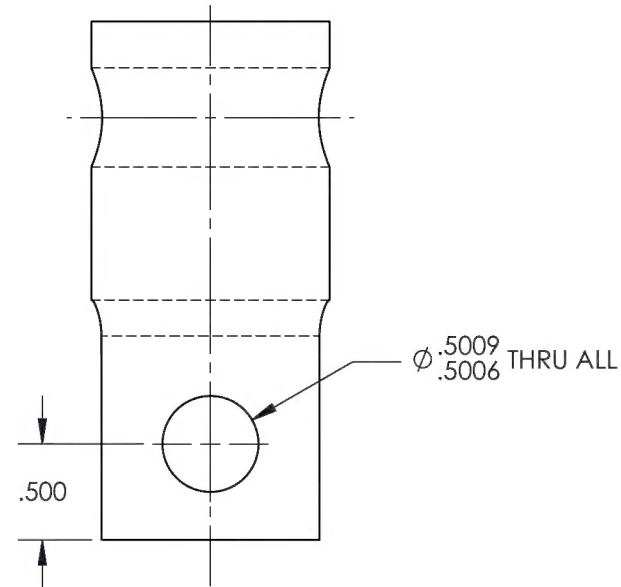
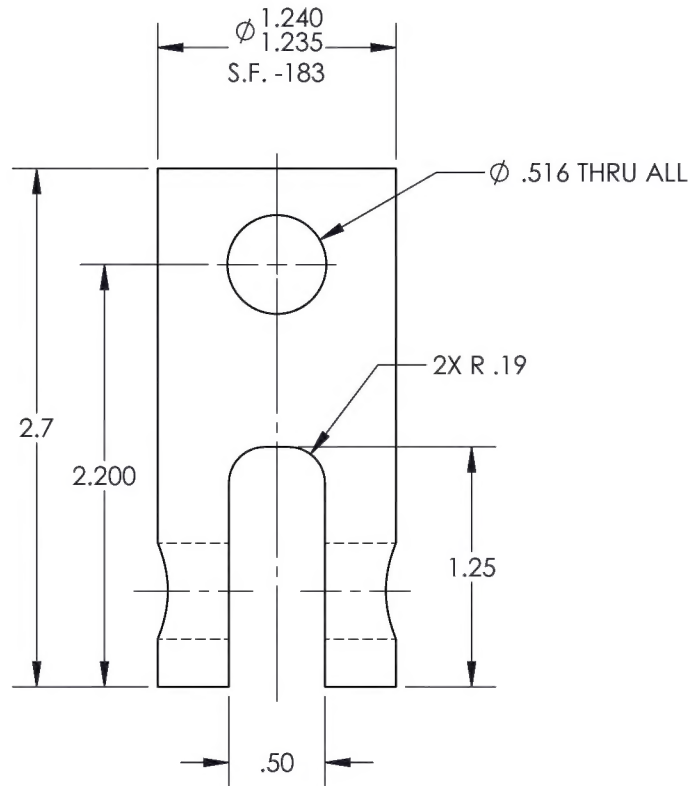
NOTE:  
PAINT GRAY OR RED.

(-185)  
TUBE INSERT UPPER

<b>DART</b> AEROSPACE	
TITLE VERTICAL CAPTURE TRANSPORT	
DWG NO. VCT-5-185	REV 3
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P Walbrich</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 35-39
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 8/13/2014
SHEET 48 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0043	-187 CH'D DIMS WAS Ø1.25 S.F. -183 IS Ø1.240 (+.000 -.005) S.F. -183, WAS LIMITS Ø.4989-.4996 IS LIMITS Ø.5006-5009 THRU ALL. CH'D MAT'L WAS 1018 IS 4140/4142. ADDED HEAT TREAT RC 35-39. ADDED NOTE PAINT GRAY OR RED.	2/11/2015	PMW	JAG



NOTE:  
PAINT GRAY OR RED.

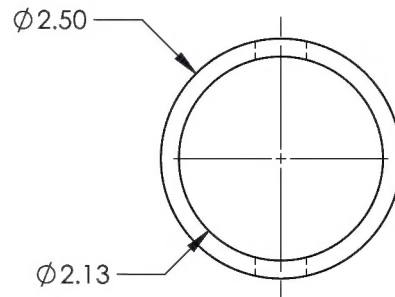
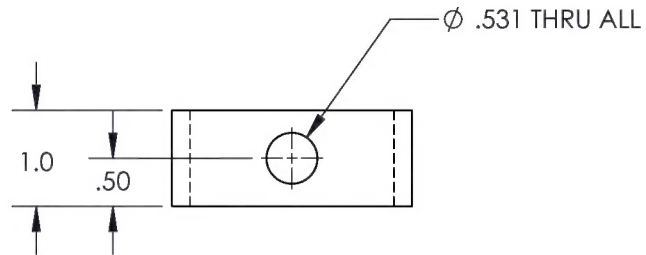
(-187)

TUBE INSERT LOWER

<b>DART</b> AEROSPACE	
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>	
DWG NO. <b>VCT-5-187</b>	REV <b>3</b>
MAT'L 4140/4142	DRAWN BY: GILBERT
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>P Walbrich</i>
.XXX ± .005 FRACTIONS ± 1/8	HEAT TREAT RC 35-39
.XX ± .01 ANGLES ± 5°	FINISH SEE NOTE
.X ± .1	SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:1	DATE 8/13/2014
SHEET 49 OF 50	

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
3	15-0326	-189 CH'D FINISH WAS POWDER COAT SAFETY ORANGE IS POWDER COAT SAEFTY YELLOW.	9/28/2015	RJC	JAG



-189

STOP

<b>DART</b> AEROSPACE		
TITLE <b>VERTICAL CAPTURE TRANSPORT</b>		
DWG NO. <b>VCT-5-189</b>		REV <b>3</b>
MAT'L CDS UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1		DRAWN BY: <b>GILBERT</b> APPROVED <i>P Walbrich</i> HEAT TREAT FINISH SPEC POWDER COAT SAFETY YELLOW USED ON MODEL
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING		
SCALE <b>1:2</b>	DATE <b>8/13/2014</b>	SHEET <b>50 OF 50</b>